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# THE ARCHITECTURAL REVIEW

*A Magazine of Architecture & Decoration.*



Front Door of Dr. Johnson's House in Gough Square, London, E.C.

DECEMBER 1918

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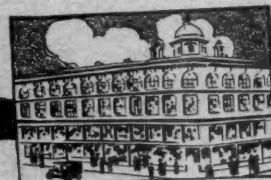
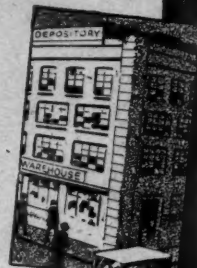
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Plate I.

DR. JOHNSON'S HOUSE. GOUGH SQUARE, LONDON, E.C.

December 1918



## DR. JOHNSON'S HOUSE IN GOUGH SQUARE.

By L. ARNOT and W. GODFREY ALLEN.

IF you go eastwards down Fleet Street on the left-hand side of the road, and walk on the wrong side of the pavement—to your inevitable unpopularity—and peer down every passageway between the houses, you may, with luck, find the way to Dr. Johnson's house in Gough Square. With all your might resist the allurements of "Johnson's Court," whose suggestive title will almost certainly land you in a tangle of lanes warranted to baffle the stoutest Johnsonian. Say constantly to yourself, "Bolt Court will I have, and no other." Imitations are worthless and misleading.

Having found your Court, plunge boldly down it. Faint heart never won Gough Square. You must turn to the right after you have gone thirty yards along Bolt Court, then to the left, and then to the left again. If you follow these directions faithfully you ought then to be standing at the south-east corner of a tiny square, cobbled in the most unsympathetic fashion, at the north-west end of which stands the Mecca of your pilgrimage—a comfortable red-brick Mecca. Carlyle's description of his visit to the house in or about 1832 may be quoted:—

"We, ourselves, not without labour and risk, lately discovered Gough Square, between Fleet Street and Holborn (adjoining both to Bolt Court and to Johnson's Court); and on the second day of search, the very house there, wherein the English Dictionary was composed. It is the first or corner house on the right hand as you enter through the archway from the north-west. The actual occupant, an elderly, well-washed, decent-looking man, invited us to enter, and courteously undertook to be cicerone, though in his memory lay nothing but the foolishlest jumble and hallucination. It is a stout, old-fashioned, oak-balus-traded house. 'I have spent many a pound and penny on it since then,' said the worthy landlord. 'Here, you see, this bedroom was the Doctor's study; that was the garden' (a plot of delved ground somewhat larger than a bed-quilt) 'where he walked for exercise; these three garret bedrooms' (where his copyists sat and wrote) 'were the place he kept his—Pupils in!' *Tempus edax rerum!* Yet ferax also; for our friend now added, with a wistful look, which strove to seem merely historical, 'I let it all in lodgings to respectable gentlemen, by the quarter or the month; it's all one to me.' 'To me, also,' whispered the ghost of Samuel, as we went pensively on our ways."

No. 17 Gough Square, the house in which Dr. Johnson compiled the greater part of the Dictionary, has had a chequered career. It was probably built about 1700, and Johnson lived here for ten years—from 1748 to 1758—after which he went to Staple Inn. The history of the house from the time Johnson lived there is obscure. It was used as a lodging-

house for a good many years, and later as the office of a firm of publishers. In 1911 it was bought by Mr. Cecil Harmsworth, M.P., and as it stood then was in great disrepair; parts of the fabric were structurally unsound, the roof leaked, the plaster had fallen in large patches from ceilings and walls, the staircase and several of the floors were unsafe, and the whole interior was thick with dust and dirt.

The work of restoration was put into the hands of Mr. Alfred Burr, F.R.I.B.A. The modern partitions which were found in the hall, on the landings, and in the Dictionary Attic were taken away; all the plasterwork was renewed, as it was in such a state of decay; more consistent window sashes were inserted, as those found in the house at the time of its purchase were modern and out of keeping with the style of the house itself, and the staircase was strengthened by iron joists in one or two places. Mr. Harmsworth intends to

present the house to the nation as a London Memorial to Dr. Johnson and his friends, and the nation will be very much the richer; though how Mr. Harmsworth can bring himself to part with such a treasure is a mystery to the less generous-minded of the two writers of this article.

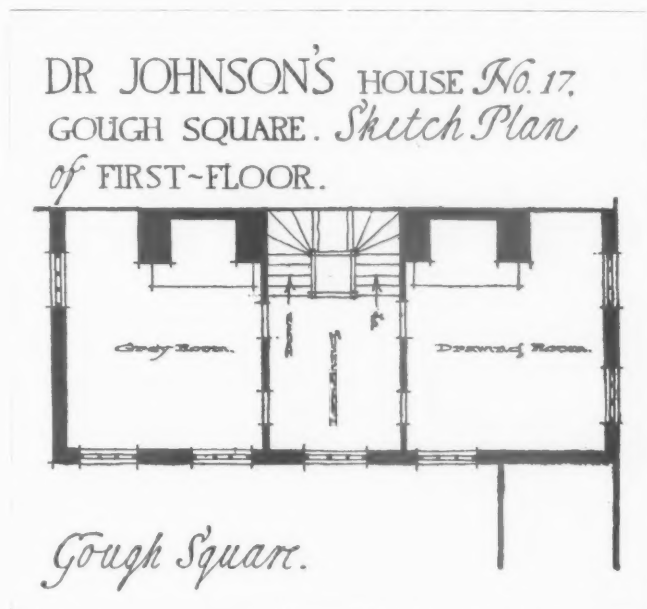
The exterior of No. 17 is striking mostly by its comfortable solidity. Adjoining it, on the right as one faces the house, is an archway which forms the only entrance to the Square through which carts can pass; but the reader is warned against approach by this tortuous route, particularly in a taxi, for in those narrow lanes your meter will go ticking up while you take your turn in backing to enable some other

vehicle to squeeze past, and you will arrive much the poorer.

Architecturally, a noteworthy feature of the exterior is the construction of the string-courses, which stop about one foot from the angles of the house, and consist of five brick courses brought forward to a 3 in. projection. The windows are beautifully proportioned. The iron ties appear to be of a much later date than the house itself.

The front doorway should also be noticed. It consists of a heavy cornice, a frieze fluted and ornamented at intervals, and architrave continued round the door. The capitals are fluted in the same way as the frieze. The side door, leading into the "bed-quilt" garden, is not original, but is a modern copy of the front door.

On the stone steps which lead to the front door one might look for the ghost of Dr. Johnson's cat, sitting with tail neatly curled-over paws, in all the dignity of a lexicographer's pet, while keeping a sharp green eye for the return of his master with those delicious oysters which the Doctor always himself went to buy for the cat, because he was afraid that if he asked the servants to do so they might take a dislike



to the poor creature. Boswell (who could not bear cats, and always felt uncomfortable when one was in the room) apparently suffered a good deal by Johnson's affection for his cats, for he describes how "Hodge" used to scramble up the Doctor's chest, while his master rubbed his back and pulled his tail, no doubt enjoying Boswell's discomfort, and fully aware of that faithful spaniel's own longing to be stroked.

On entering, you find yourself in a square hall, and the plan of the house is at once obvious. It consists of the hall, with a room on either side, and this plan is carried right up to the attic without change. It is extremely simple, but on a most comfortable though somewhat wasteful scale.

On the left of the front door lies what was almost certainly Dr. Johnson's dining-room, containing a cupboard fitted up with numerous little shelves; while the room on the right has a powdering cupboard, and was probably used as a cloak-room where guests could repair the damage done to their powdered heads by the low roof of a sedan chair. In both



DRAWING-ROOM.

these rooms and on the stair landings the wood has been left bare, with the application only of so much staining as was necessary to produce a uniform effect. The same principle has been adopted in regard to the balustrade of the staircase, which is made of pine, not oak, and which is one of the most beautiful features of the house, only in this case no staining has been used. There is no doubt, however, that the woodwork throughout the house was painted in Johnson's time.

From the hall a flight of steps leads down to the kitchen, which, like the attic, runs the whole width of the house. Here there are great beams and two vast fireplaces, and though rather dark it is not unworthy of being the workshop where were prepared those dinners of veal pie with plums, and the fish sauce, which the Doctor loved so dearly.

On the first floor the two rooms are so arranged that the partitions swing on hinges; that on the left (as one comes up the staircase) across the staircase, completely shutting it off, with doors to give access up and down; and that on the right across the windows of the room on that side. By this means the whole floor could be made into one long room, where Dr. Johnson could entertain large parties of his friends, secure from the draughts so abhorred by the eighteenth century; while in later years, when the house was a lodging-house, the seven German boarders used this floor as a ballroom. On ordinary occasions the room on the left was probably the drawing-room, and here it was that so much tea was drunk, with the blind Mrs. Williams (after the death of Mrs. Johnson) acting as hostess, and feeling for the edges of the cups with her finger, while the guests listened to the Doctor's conversation, which one of his friends described as being "as correct as a second edition."

Francis Barber, the negro servant who entered Johnson's service in 1752, gave Boswell what he describes as an "authentic and artless account" of Johnson's life at that time:—

"Mrs. Williams was then living in his house, which was in Gough Square. He was busy with the Dictionary.



DINING-ROOM.

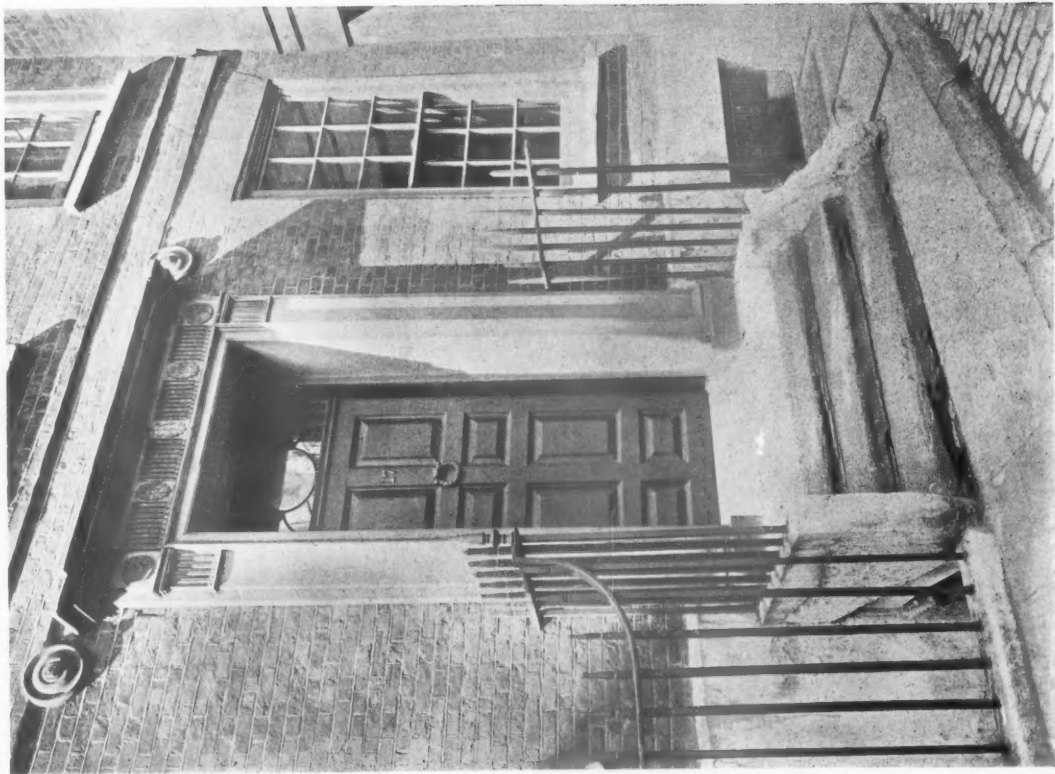


Plate II.

Front Door.

THE DOORWAYS OF DR. JOHNSON'S HOUSE IN GOUGH SQUARE.

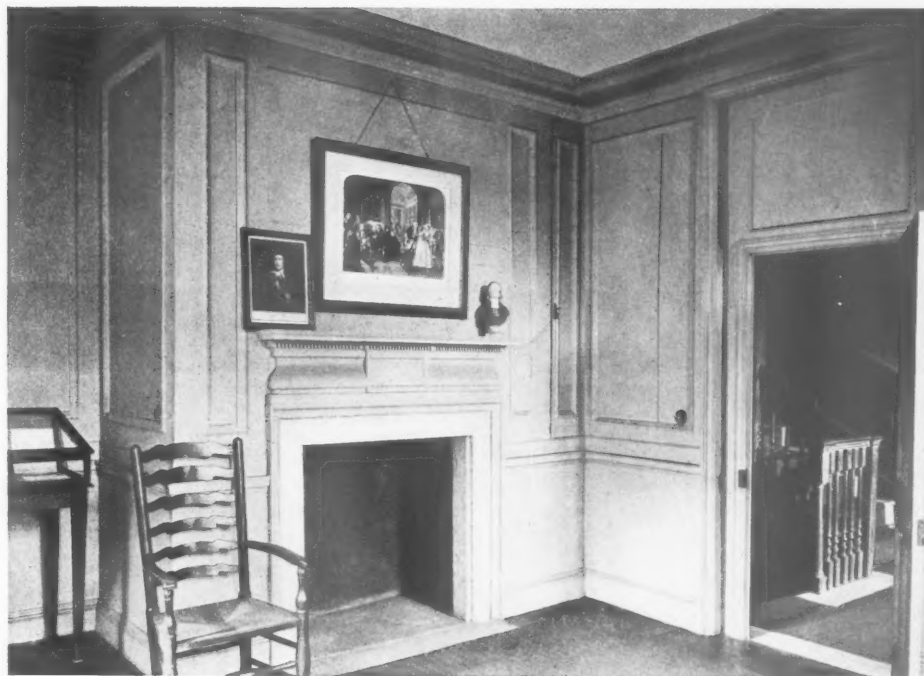


Side Door

December 1918.



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"THE GREY ROOM."

Mr. Shiels, and some others of the gentlemen who had formerly written for him, used to come about him. He had then little for himself, but frequently sent money to Mr. Shiels when in distress. The friends who visited him at that time were chiefly Dr. Bathurst and Mr. Diamond, an apothecary in Cork Street, Burlington Gardens, with whom he and Mrs. Williams generally dined every Sunday. There was a talk of his going to Iceland with him, which would probably have happened, had he lived. There was also Mr. Cave, Dr. Hawkesworth, Mr. Ryland, merchant on Tower Hill, Mrs. Masters, the poetess, who lived with Mr. Cave, Mrs. Carter, and sometimes Mrs. Macaulay; also Mrs. Gardiner, wife of a tallow-chandler on Snow Hill, not in the learned way, but a worthy good woman; Mr. (now Sir Joshua) Reynolds, Mr. Miller, Mr. Dodsley, Mr. Bouquet, Mr. Payne, of Paternoster Row, booksellers; Mr. Strahan, the printer; the Earl of Orrery, Lord Southwell, Mr. Garrick."

To this list of friends should certainly be added the names of Oliver Goldsmith, Dr. Burney, Bennet Langton, and Topham Beauclerk.

It must have been a strange household at No. 17 Gough Square. The Doctor, with his ungainly appearance, his fits of rage, his rudeness—for which he never failed to apologize—his many queer habits, among others that of treasuring bits of orange-peel for some mysterious purpose which he refused to reveal to the inquisitive Boswell; his wife; Mrs. Williams, who had come to stay in his house for an operation on her eyes which resulted in her total blindness, and her staying on permanently; old Mr. Levett, reputed to have been a bad character, but of whom Goldsmith said, "He is now become

miserable, and that ensures the protection of Johnson"; the negro servant, and the inevitable cat.

It was in this house that Johnson wrote "Rasselas" to pay for the expenses of his mother's funeral. Other works which may be associated with the Gough Square period are: "The Vanity of Human Wishes," which was published in January 1749; "The Rambler," which first appeared on 20 March 1749-50, to its concluding number, which is dated 17 March 1752. In 1749 Garrick produced "Irene" at Drury Lane Theatre. The famous letter to the Earl of Chesterfield (7 February 1755) was in all probability written from this house. During the same period Dr. Johnson contributed largely to "The Adventurer," and began to publish "The Idler." It was in this house that occurred the most tragic event in his life—the death of Mrs. Johnson on 17 March 1752.

With a difference of twenty-five years between them, Samuel and "Tetty" Johnson seem to have been a very happy

couple. When they married the bride was fifty, by no means a beauty, and with a grown-up daughter; and the bridegroom was twenty-five, and of a most unprepossessing appearance. His step-daughter described him as being so thin that his immense structure of bones was the most striking thing about him, with straight, stiff hair, St. Vitus's dance, and scrofula. However, the bride was so struck with his conversation that she overlooked these trifling disadvantages, and remarked that this was the most sensible man she had ever seen in her life.

Boswell gives an account of their marriage which he had received from Johnson himself. The ceremony took place at



DICTIONARY ATTIC.

Derby, which was within riding distance of the bride's home, and Johnson described the journey thus :—

"Sir, she had read the old romances, and had got into her head the fantastical notion that a woman of spirit should use her lover like a dog. So, sir, at first she told me that I rode too fast, and she could not keep up with me; and when I rode a little slower she passed me, and complained that I lagged behind. I was not to be made the slave of caprice; and I resolved to begin as I meant to end. I therefore pushed on briskly till I was fairly out of her sight. The road lay between two hedges, so I was sure she could not miss it; and I contrived that she should soon come up with me. When she did I observed her to be in tears."

Boswell admiringly applauds the Doctor's behaviour as showing "a manly firmness."

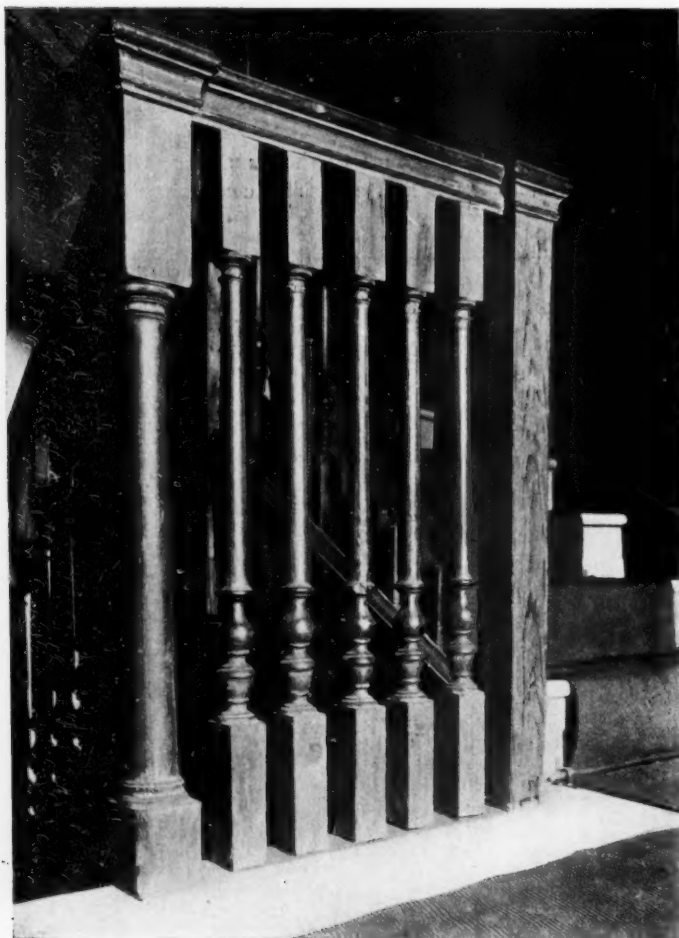
It may be interesting to note that Johnson's opinion of the Church of England Marriage Service was that it is "too refined."

To return to the house where lived this curious pair. On the second floor are two rooms which must have been used as bedrooms. They are of exactly the same proportions as those below, with the wide landing between. Above them lies the "attic," as Johnson called it, the room in which, partitioned off, his six helpers worked, copying out his notes for the Dictionary. Later, when the room was promoted to be the Library, Dr. Burney found him there in company with five or six Greek folios, a deal writing-desk, and a chair and a half. Apparently he was very sensitive about this last unfortunate chair; and Miss Reynolds, daughter of Sir Joshua, tells us that

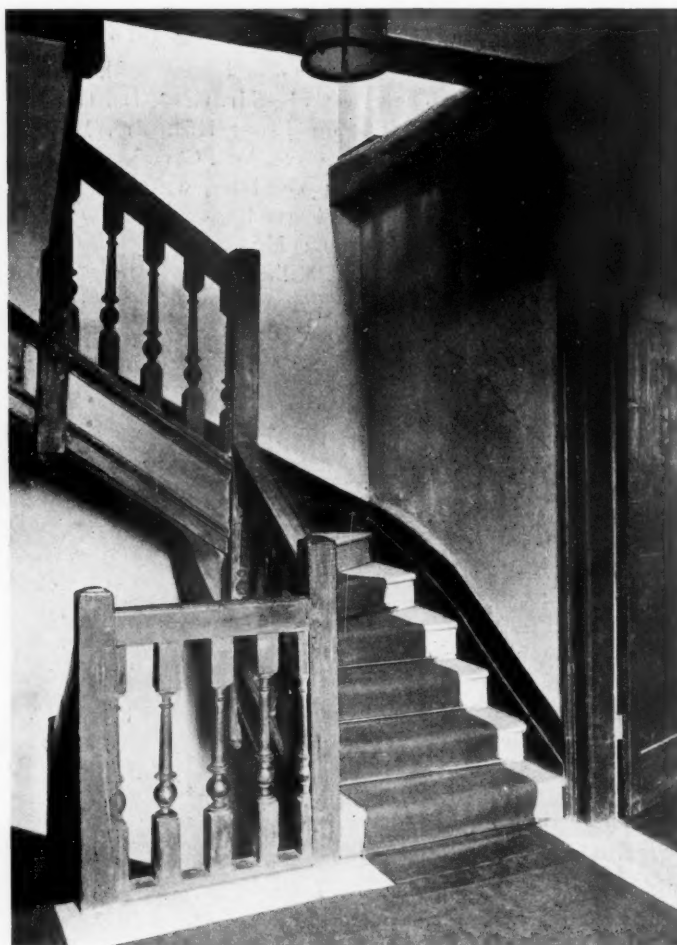
"he never forgot its defect, but would either hold it in his hand, or place it with composure against some support, taking no notice of its imperfection to his visitor." Remembering how poor Johnson was during the years that he lived in Gough Square, it is not surprising that the furniture was so unworthy of the house. It was from this house that he addressed a letter to his friend Richardson, asking him for a loan of £5 18s., as he was at that moment under arrest for failure to pay a debt of that amount. Richardson, who had his printing office in Salisbury Square, on the opposite side of Fleet Street, did what was needful. He could well afford the loan, for, besides being prosperous as a printer, he had already reaped almost as much profit as fame from "Pamela" (1740).

When the house was used as a lodging-house this top room was again divided into three, and there slept the seven dancing Germans. When Mr. Harmsworth put it into good repair it was found that a massive beam which had been carried right through to the chimney-flue in this room was charred almost through and in a most perilous state.

It is unfortunate for us that Boswell did not make Johnson's acquaintance until after he had left Gough Square, or we might have learnt considerably more of the Doctor's life here. As it is, we have only the scantiest records. It is not known exactly what caused him to move from such a delightful place, but he must surely have regretted leaving it as much as we regret that we are not able to live there ourselves.



DETAIL OF STAIRCASE ON FIRST FLOOR.



STAIRCASE (UPPER STORY).



## CAERLEON AND ITS MUSEUM.

By C. F. BATES.

**G**EOFFREY OF MONMOUTH tells us that Caerleon was built by Beliaus or Beli-Mawr, who must have lived three or four centuries before Christ; and Coxe, in his "History of Monmouthshire," refers to a strong British camp called Belingstocke, situate about a mile from Caerleon, which seems to confirm the tradition that the town is of British origin; but of its earliest history very little is known. The modern name Caerleon is derived from the Welsh *Caer*, a fortified enclosure, and *Lleng*, the Welsh term for legion; and within the walls of this fortification was stationed the second legion of Claudius under the command of Vespasian.

Caerleon was known to the Romans as *Isca Silurum*, and it became the metropolis of that division of the island called *Britannia Secunda*, and was the principal city of the Romans in Great Britain. They fortified it with strong walls three miles in circuit, enclosing a quadrilateral area measuring

underneath this coating white sand had been sprinkled. The effect of the sun's rays upon a roofing of these tiles produced a brilliant yellow hue, and must have given to the beholder the appearance of a golden roof.

The Tenth Diocletian persecution extended to Britain, and Enderbie asserts that it had its beginning at Caerleon. We are told that the Roman soldiers broke into the churches and made every one of the worshippers captive. But the accommodation of the prisons being inadequate to contain so many people, a general massacre was ordered, and men and women were torn limb from limb, and the streets of the city became a veritable shambles. St. Julian and St. Aaron (both of whom preached the doctrine of Christianity in this part of Britain) suffered martyrdom; but after the final submission of the Britons to the Romans, Caerleon became, under the auspices of Antoninus, the seat of learning and devotion. Three



CAERLEON MUSEUM, MONMOUTHSHIRE.

Lockwood, Architect.

530 yds. by 460 yds., and spared no effort in their endeavours to transform Caerleon into a magnificent city, worthy to be the metropolis of the British Empire. In this they were well served by the proximity of the noble river Usk, on the banks of which they erected splendid imperial palaces with golden roofs; temples; an amphitheatre, parts of which are illustrated; baths, aqueducts, and splendid dwellings of various descriptions, remains of which give some faint idea of what were the beauty and size and opulence of Caerleon. These magnificent remains were described in the twelfth century by Giraldus Cambrensis as emulating the grandeur of Rome itself. It may seem that the description of the roofs of the palaces as "golden" is an exaggeration, but we may be sure that their grandeur produced that impression upon the mind of Giraldus. A great number of roofing tiles have been discovered which are practically of the same dimensions and form as our present pantiles. They have been glazed with a brown substance, and

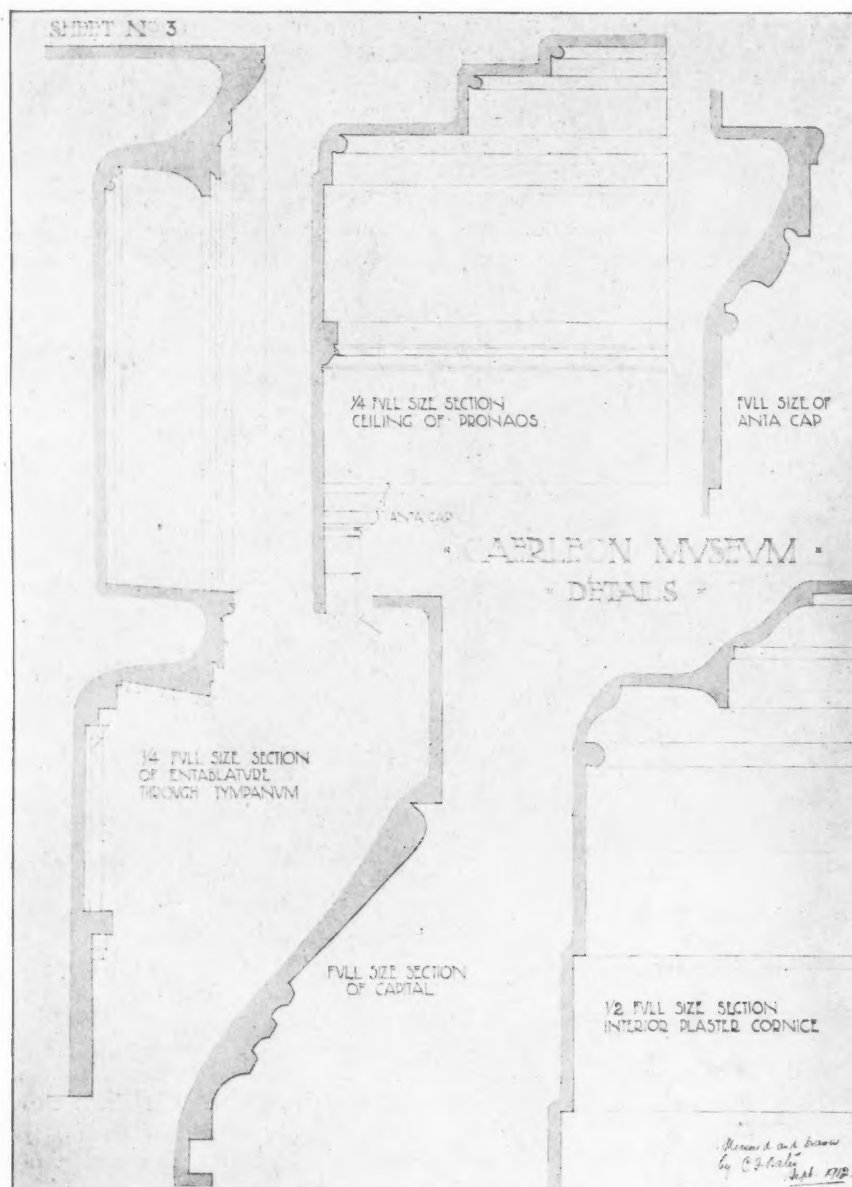
Christian churches were erected, two in honour of the martyrs St. Julian and St. Aaron, to which were annexed respectively a nunnery and a priory of Cistercian canons; and a third to which was added a monastery which afterwards became the metropolitan see of Wales, and of which Dubricius, the great opponent of the Pelagian heresy, was the first Archbishop. Under his successors the see continued to flourish to such an extent that at the time of the Saxon invasion its college is said to have contained, among other students, not less than two hundred who were well skilled in geography and astronomy; it was afterwards translated to Menevia by St. David, and has since that time been known as the See of St. David. There are some small remains of the monastery still existing.

Very little is known of the history of Caerleon during the Middle Ages, in spite of its great consequence and strength during the times of the Roman occupation. Caradoc mentions

that during the Saxon era Alfred the Great sent his fleet to subdue Caerleon-upon-Usk, specified in the Triades as one of the thirty-three fortresses of Britain, but was obliged to recall it before he had effected the conquest, on account of the threatening progress of the Danes. Caerleon is twice mentioned in Domesday Book, which tells us that William de Scohies, who was a powerful Norman chieftain, held the Crown part of the demesnes belonging to the castle; but we are not informed as to whether he occupied the castle itself. Before Newport Castle was built there was no other fortified place of

the town fell into neglect and the castle into decay: the remains of the castle are inconsiderable, consisting chiefly of heaps of stones around the base of a lofty mount on which the keep was built, and the ruins of a dilapidated portal at a distance, that probably formed the entrance.

Portions of the walls of the city still remain, and these were probably only from ten to twelve feet in the highest part. Within the walls the earth has accumulated, and is from six to eight feet above the surface outside. Many of the facing stones of the wall have been removed, probably to build the



Measured and Drawn by C. F. Bates.

any strength between the Welsh borders and Chepstow, and so Caerleon became the object of contention between the English and the Welsh.

The Castle was probably built about the time of the Conquest, but no mention of it occurs till the year 1171, when Henry II took the town and deposed Iorwith ap Owen, lord of Gwent, who, in 1173, retook it after a vigorous defence and restored it to the Welsh. After repeated sieges it was retained by Lewellyn ap Iorwith till the reign of Edward I, when, upon the overthrow of the independence of the Welsh,

houses of the modern town. The mortar in general is not mixed with pounded bricks, though this is the case near the corners of the walls where strength was required. The original putlog holes still remain.

According to Lewis there was in 1813 a Market House, supported on four massive columns of the Tuscan Order, supposed to have belonged to some Roman structure, two bases of similar dimensions and character having been dug up near the walls.

Several remains of the Roman station are still visible,

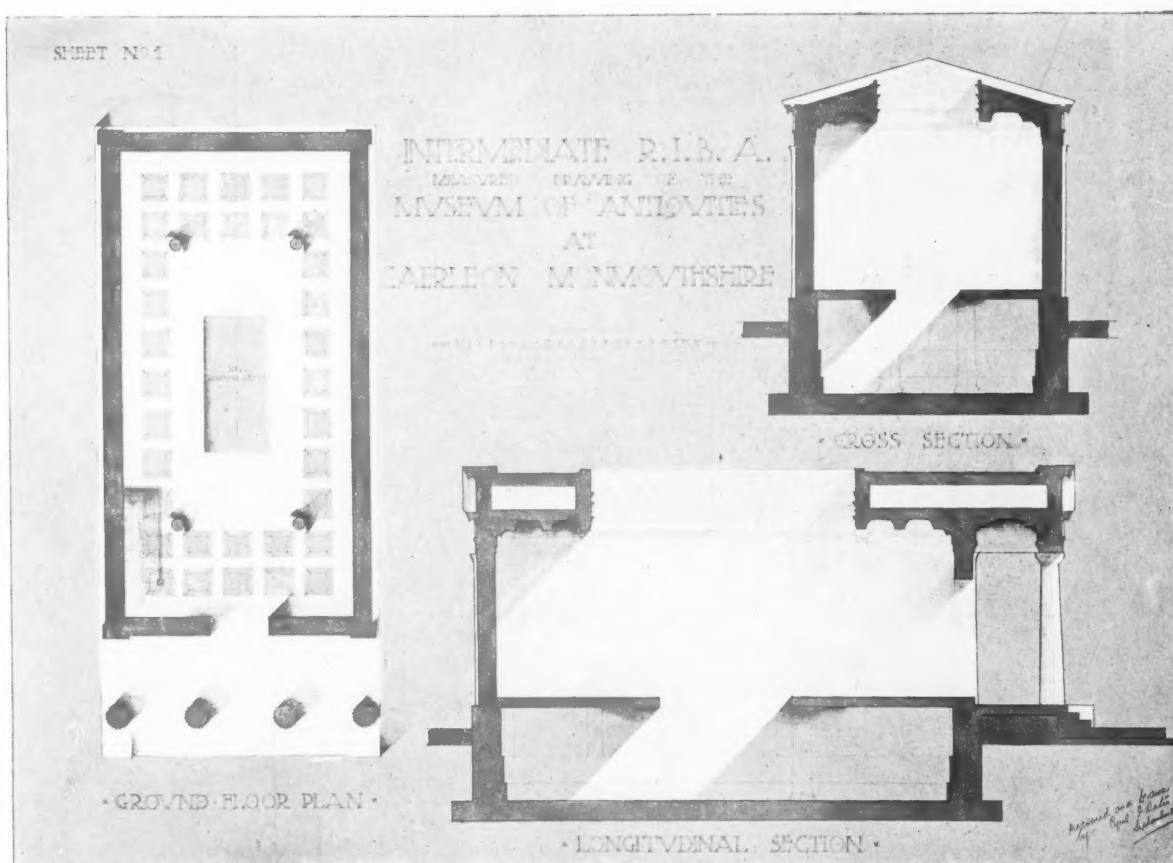
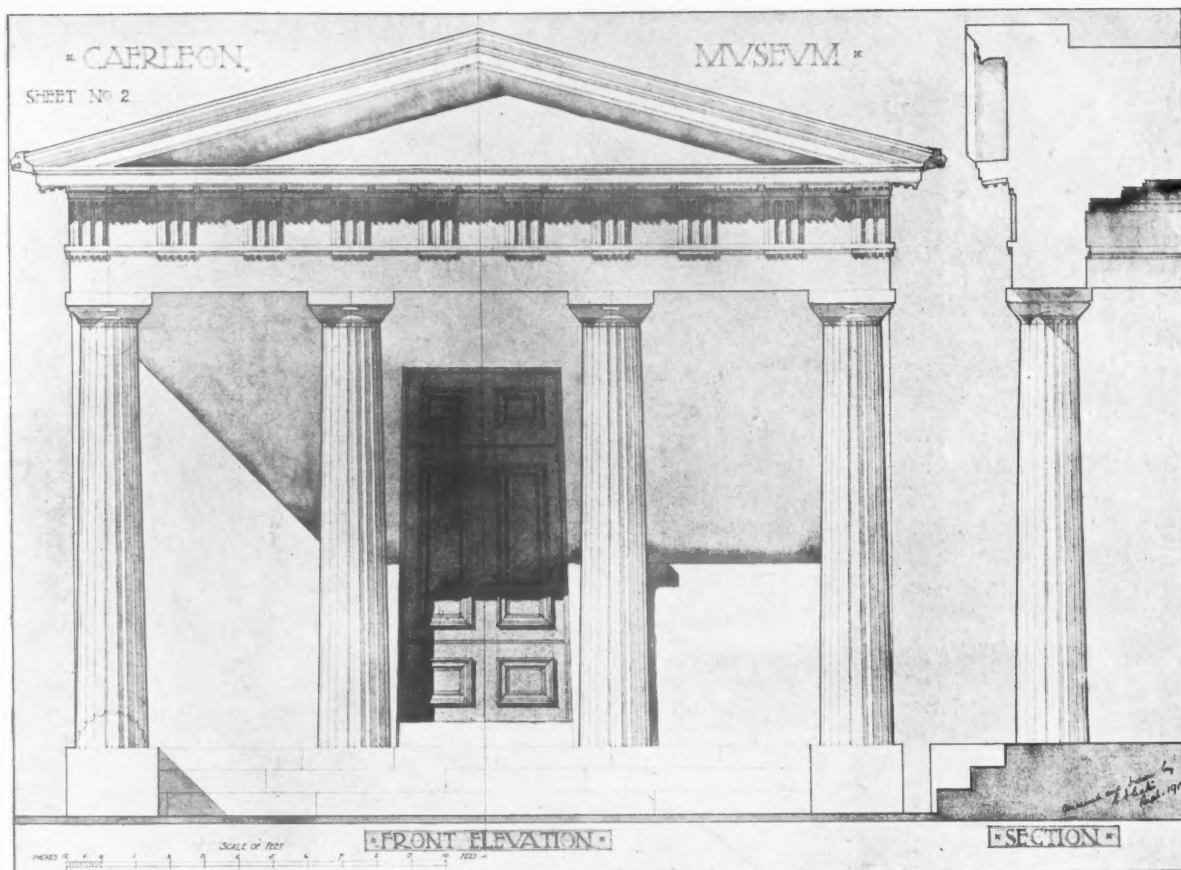


Plate III.

CAERLEON MUSEUM, MONMOUTHSHIRE.

Lockwood, Architect.

Measured and Drawn by C. F. Bates.

December 1918.







PORTION OF THE ROMAN AMPHITHEATRE WALLS,  
RECENTLY UNEARTHED.

and numerous minor relics have been discovered, consisting of portions of columns, altars dedicated to Jupiter Dolichenus and the goddesses Astræa, Diana, and Minerva, bricks inscribed "LEG. II AUG.," tessellated pavements, coins from Cæsar to Valentinian inclusive, earthen vessels, urns, a gold ring with an intaglio representing Hercules strangling the Nemæan lion, a cornelian seal of Ceres, a mutilated statue of Jupiter in bronze, portions of the baths, etc.

The piece of tessellated pavement discovered in 1866 is worthy of special notice. It was discovered whilst digging a grave in the north-east corner of the churchyard. The centre of the pavement is 8 ft. square, and forms a Cretan labyrinth which is surrounded by a border of scrollwork of elegant design, being 1 ft. 6 in. wide at the sides and 3 ft. at the two ends. The groundwork is white and formed of white limestone, the tesserae being about  $\frac{1}{4}$  in. square. The scrolls are formed with a single dark grey line of limestone, both these limestones being found in the district. The only colour introduced is in the vases at each end, which are emphasized by the use of bright red tesserae of brick. It is unfortunate that so little of this pavement remains, as the writer believes that it is the only example of a tessellated pavement with a labyrinth in the centre that has been found in Britain.

The Museum is used for the purpose of preserving these relics for the information of future generations, and how very interesting they are may be gathered from the illustrations published with this article.

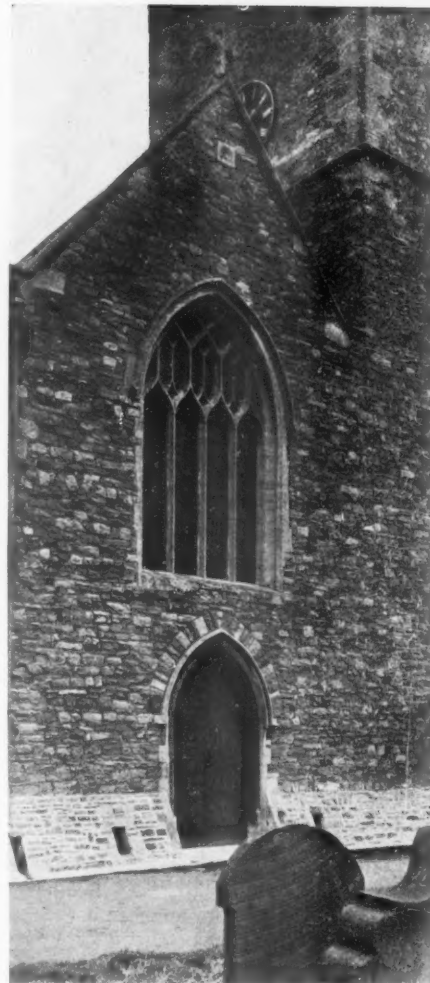


PORTION OF WALL OF ROMAN AMPHITHEATRE

The Museum itself was erected in the early part of last century from the designs of Mr. Lockwood, and is of the Greek Doric Order, with four fluted columns carrying a pediment and forming a portico. The portico is the most interesting part of the building; its proportions and details are worthy of study. The entablature runs all round the four walls, and is supported at the corners by returned pilasters. On the floor of the crypt the tessellated pavements are set out so that one is enabled to see them to the best advantage. It may seem incongruous to some that a building in the form of a Greek temple should be used as a museum for Roman remains, and yet it cannot be denied that it

expresses its purpose. No one passing along the main thoroughfare of this sleepy little town can fail to be arrested by its unusual appearance, nor fail to form the conclusion that it is the local museum. Exhibits of Roman memorial stones in the portico may help to bring this about. One of them bears the following inscription: "To the Gods of the Shades. Julius Julianus, a soldier of the Second Legion, the Augustan, served eighteen years, aged forty, is laid here by the care of Amanda his wife."

To the north of the town is an extensive quadrilateral



CHURCH OF ST. CADOC (WEST END  
ERECTED ON THE WALLS OF THE  
ROMAN BASILICA).



SOUTH ANGLE OF THE WALL OF THE ROMAN CITY.



FRAGMENTS OF TESSELLATED PAVEMENT DISCOVERED AT CAERLEON (NOW IN THE MUSEUM).

encampment, with seven smaller camps near it; and on the banks of the Usk are considerable remains of the amphitheatre, called by the inhabitants King Arthur's Round Table. These remains have recently been explored, and stone tiers of seats for the audience have been discovered. Immediately opposite the amphitheatre there are three apparent breaks in the wall, and these were probably connected with sally-ports or passages leading to it from the city.

The present church was erected on the site of the ancient basilica, and, according to some authorities, portions of the ancient walls were incorporated with the modern building, and parts of the masonry of the west wall are certainly very like Roman work. The voussoirs of the walled-up semicircular arch under the north wall of the tower are from the same quarries as the stones unearthed from the buried ruins of the Roman buildings, and may have been adapted to their present position after the destruction of the arcade for which they were originally designed. Modern Caerleon is divided by the River Usk into two parts: Caerleon proper, which the present inhabitants delight to call "The City"; and Caerleon ultra Pontem, now designated "The Village."

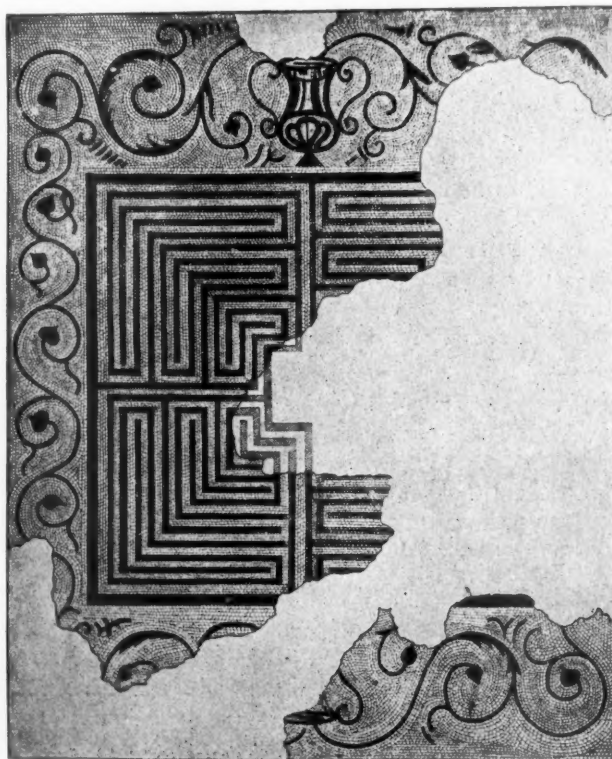
Close to the site of the ancient bridge which carried the old Roman road from Isca Silurum to Venta Silurum (the modern Caerwent) stands the old posting house — the Hanbury Arms — where Tennyson stayed while he wrote one part of the "Idylls of the King," and drew inspiration no doubt from the Arthurian atmosphere of his surroundings.

The present bridge over the River Usk is a massive stone structure, and it replaced a wooden bridge which existed in 1801, and is described by Coxe. He says: "The wooden bridge

over the Usk may be considered as similar to that erected by the Romans; the frame is not unlike the carpentry of Cæsar's bridge over the Rhine, which he has described in his Commentaries, and of which Stuckeley has given a plan in the second volume of his 'Itinerarium Curiosum.' The floor, supported by ten lofty piers, is level, and divided by posts and rails into rooms or beds of boards, each 12 ft. in length; the apparently loose and disjointed state of the planks, and the clattering noise which they make under the pressure of a heavy weight, have not infrequently occasioned alarm to those who are unused to them. Some travellers, from a superficial view of the structure, have asserted that the planks are placed loose to admit the tide through their interstices when it rises above the bridge, and which would, if they were fixed, force them from the frame and carry them away. But, in fact, the tide has never been known to rise above the bridge, nor was the flooring constructed to obviate this inconvenience. Formerly the planks were fastened at each extremity with iron nails; but the wood being liable to split, and the nails frequently forced up by the elastic agitation of the beams under the pressure of heavy carriages, the planks were secured from rising by horizontal rails fastened to the posts, and prevented from slipping sideways by a peg at each end within the rail."

Since the high tides of the River Usk exceed thirty feet, and flow at the rate of seven miles an hour, this structure which Coxe describes does not inspire a sense of safety.

The field next to the one in which is the amphitheatre is still called the Kennel field, and no doubt the buildings in which the animals for the sports were kept were erected there.



TESSELLATED PAVEMENT FOUND IN CAERLEON CHURCHYARD, 1866 (NOW IN THE MUSEUM).



The tradition of the amphitheatre seems to have been lost sight of for some years, as the place was always known to moderns as Arthur's Round Table, the memory of the gorgeous feast that was held in it at the time King Arthur was crowned by Dubricius seeming to have obliterated all recollection of the exciting scenes enacted under the auspices of the Romans.

Caerleon is an inexhaustible source of pleasure to the antiquary, and well worth a long journey by anyone interested in British and Roman remains.

The photograph in the top left-hand corner on page 117 shows the dressed stone quoins recently unearthed at the entrance to the amphitheatre from the Kennel field. That in the opposite corner shows the west end of the Church of St. Cadoc erected on the walls of the Roman basilica. Of the

two photographs at the bottom of the same page, that on the left shows a portion of the circular wall of the amphitheatre, with its bold projecting piers (all uncovered a few years ago), while that on the right, showing the south angle wall of the Roman city, taken from outside the wall, includes a small piece of the original facing and the rubble masonry backing.

The piece of tessellated pavement shown at the bottom of page 118 is laid down in the crypt of the Museum, where it may be seen. Pavements with the plan of the Cretan labyrinth in the centre are extremely rare. No other has been found in England, and what is believed to be the only other example—found in 1815 near Salzburg, in the Tyrol—is in the Museum at Vienna. In the centre of it is a figure of the Minotaur, which is represented as a man with a bull's head and partly covered with skin.

## ARCHITECTURE, ENGINEERING, AND ETCHING.\*

BY FRANK L. EMANUEL.

ALTHOUGH a painter by profession, I have always regarded architecture as the most vital of the fine arts, for the architect actually has it within his power to alter and beautify the contours of the surface of the earth itself. The architect can encrust a depressing waste of bare ground with inspiring and noble buildings, he can improve on some dull and sulky skyline provided by nature in a tired mood, with the soaring silhouettes of imposing architectural triumphs. Why, the very ground over which we now are was once the dreary Thorney Marsh. Now it blossoms with a grand old Abbey, an impressive Parliament building, a charming County Hall, the headquarters of the Office of Works Sketch Club, and so forth.

Painters and sculptors do but adorn the edifices *you* erect, and incidentally may I say that I think it should be your pleasurable duty to provide surfaces and recesses which shall cry aloud for the finishing touches provided by *their* productions.

The architect, like the artist, must, if he is to create, be a visualizer—each sees his work as it should be when completed, before it is begun. The one builds his picture, or rather has it built, while the other paints his.

In some ways the architect has the harder task, for the picture he presents to the public is no mere flat, insensate surface decorated so skilfully as to produce marvellous illusions and stirring sensations, but is a thing of four dimensions, a combination of compositions, not existing for their own intrinsic beauty, but as the artfully contrived outcome of utilitarian needs. And these needs *must* take precedence of all ideas of mere beauty; they impose all kinds of complicated problems (inspiring handicaps, I would rather call them) on the architect, running, at first sight, counter to his artistic sense, but calling forth ingenuity and inventive powers which lead to artistic adventure and originality.

In my humble opinion the greatest architect is he who combines the greatest skill in planning—that is to say, in utility and suitability—with the greatest beauty in elevations and interiors.

Now, the architect is, one might say, only to a less degree than is the pictorial artist, by profession a sketcher. Neither is

content merely to see his visions and dreams in his mind's eye, but each sets down his ideas, and makes notes, on paper or canvas, of what attracts him or may prove of use to him. The artist almost always sketches, from unconquerable impulse, or in preparation for more important and more serious work.

The architect has, I presume, always made his measured drawings and professional notes, but I believe I am right in saying that he is becoming more and more impelled to sketch a wider range of subjects in various mediums, from sheer love of beautiful things, just as the painter does.

The products of the engineer are figuring more frequently in the domains of art. More and more artists are being sufficiently attracted by the powerful beauty of engineering creations to feel impelled to portray them. This is partly due to the broader purview of the artist, partly to the greater artistic sensibility of the engineer. That he should be pursuing art arm-in-arm with the architect is a matter of sincere congratulation. I believe that the modern overlapping, or rather the mingling, of the provinces of the architect and of the engineer, is going to prove of benefit to the work produced in both professions. The architect will increase his efforts to make his buildings fearlessly express their purpose, while the engineer will make his rigid, matter-of-fact constructions more pleasing from the æsthetic standpoint.

A real but indirect boon to the intelligent public at large may also arise from your adopting, among other practices of the artist, that of signing and dating your buildings. How infinitely more interesting and instructive our streets would be, how much more vivid their life-story, if tablets giving such information were always legible to the pedestrian! The living architect should sign, and some body should provide retrospective tablets.

Both architects and engineers will, I believe, benefit by an increased practical acquaintanceship with pictorial art. In pursuance of that long-held belief I have endeavoured for some time to get the attention of architects drawn to the etching classes at the Central School of Arts and Crafts, where I could welcome members of the allied professions to what I hope has more the atmosphere of a club for distinguished persons than of classes.

\* Substance of a lecture delivered on 18 November at H.M. Office of Works to the Office of Works Sketch Club, Sir Lionel Earle in the chair.

Now, if I were an architect, I am sure I should have felt particularly gratified if I had found that an artist had chosen some building of mine sufficiently endowed with pictorial merit to arouse in him the instinctive desire to make a picture of it. I should have felt that I had put something on the face of the earth which was not merely useful but also beautiful, just as a magnificent tree or avenue of trees or other creations of nature would appeal to the connoisseur's trained eye by its attractiveness of outline, of mass, or of colour. And I believe that your action in allying yourselves for emulation in producing pictorial work is going to help you to put forth architectural and engineering works which shall at once attract the welcome attention of artists by reason of their sheer pictorial beauty.

And by pictorial beauty I do not imply merely such objects as are commonly called picturesque—such as old and decrepit buildings or buildings with broken and tormented skylines (though the skyline is, from one point of view, a *most* important factor), but I mean also the serenity and nobility imparted by classical forms. Personally I must say that when in search of the pictorial I am largely led by the nose—the worse the stink, the more profuse the picturesqueness.

I remember some years ago there was a dead set at the New English Art Club against all or any representations of ruins, ruined castles, and so forth; anyone who was known to be doing such work was debarred from exhibiting it, and was shunned as a hopeless *dépassé* and *déclassé*. Ruins were to be taboo. Then, after some five years a certain member, too distinguished to be extinguished, painted a fine picture of a ruined castle. Immediately ruined castles became the rage, the mode. Since then other societies have favoured gasometers, and next year I hear dustbins are to occupy the attention of their greatest geniuses. There are Press-boomed groups of artists exhibiting at this day who tell us that the less their representations resemble what they represent, the better the art. They succeed most entirely in their aims—but how egregious all this folly!

For quite a number of years leading members of the representative body of etchers in this country have been trying hard to deprecate the further etching of architectural subjects, and the critics listen awe-struck to the great men and trumpet their dicta in the Press. Etch figures, etch topical subjects, they say.

With all due deference to those admirable etchers, I would say, on the contrary, do whatever attracts and interests you most; but don't get into ruts: make excursions into the unknown, break new ground occasionally, and you may find some richer soil than that to which you are used.

If as architects and engineers you find you are most interested in, and proficient in, subjects intimately connected with your profession, don't be discouraged by great people from following your natural bent into etching fairies or telegraph girls. A long study of architects' drawings and the truly splendid works of art they now produce convinces me that they have in producing *them* had the very best preliminary training for becoming unrivalled practitioners in the art of etching architectural subjects.

Be broad in your outlook on, and sympathies in, art; but for heaven's, or rather for art's, sake stop short at the lunatic "isms"—stop short, despite the ecstatic praise of their tame gang of Press critics, at vorticism, cubism, triangleism, infantilism, and similar forms of camouflaged art and camouflaged incompetence perpetrated and boomed by those who are admittedly revolutionaries and anarchists in their art, as they are in their politics.

Your own professions of architecture and engineering, unlike

painting, literature, music, and the drama, are and must remain immune from the wasting disease spread by these exotic and erotic contortionists, for the simple reason that in their destructiveness and their desire for what they call originality they dispense with construction. Well, the arch that is built without regard to constructive principles cannot stand, just as the man with a broken spine must untimely die. Unfortunately, the paper or canvas on which an idiotic building has been drawn, or on which an equally impossible and disgusting parody of a human figure has been painted, does not dissolve.

For the last thirty years I have closely followed the rapid and astounding improvement in the drawings made by architects and architectural draughtsmen in this country, as reproduced in the architectural and building press, and so forth. At one time one received a veritable shock, a thrill of joyful surprise, upon encountering a stray artistic drawing in a mass of cold mechanical work, which doubtless served its purpose with the builder, but was totally uninteresting to the artist or the connoisseur of drawings.

Now all that is changed, thanks largely, I think, to artist architectural draughtsmen such as George Seymour, Montbard, Phené Spiers, the Brewers, H. Railton, Pennell, Mallows, J. Fulleylove, Raffles Davison, Edgar Wilson, Hedley Fitton, Hamilton Jackson, Frank Richards, Hanslip Fletcher, W. Monk, H. Oakley, Falkner, and the most recent and, I think, greatest of all, Griggs. The line between architect and architectural draughtsman is difficult to draw, and on no account should the names of the following architects be omitted: Sir Ernest George, Sir Alfred Waterhouse, J. D. Sedding, the Blomfields, Prentice, Leonard Stokes, A. McGibbon, Fellowes-Prynn, H. Wilson, Sir C. Nicholson, Edgar Wood, W. H. White, W. Newman, Walcot, Fulton, Curtis Green, and many others whom you could cite to supplement these lists.

Of all these specially qualified artists not a dozen have taken up etching, yet nearly every one of these exceptions who has done so has come into prominence among etchers—to wit, Pennell, Edgar Wilson, Hedley Fitton, Walcot, and Griggs, with the rest close on their heels. This position of affairs is going to be altered.

In America there are many fine architect draughtsmen, but I do not propose to go into that further than to express my intense admiration for the exquisite architectural work done sometimes in tone and sometimes in subtle colour harmonies by Jules Guérin—he is a master alone in this work.

I believe that this great improvement of the architectural drawing from a dull, spiritless, repellent thing into one of intrinsic beauty has not made it of less practical utility, and I venture to express the opinion that too much stress has always been laid on the theory that utility is sufficient in itself to provide the best and most perfect form of beauty.

The plain oblong deal box solidly made with a stout lock makes a most practical and adequate jewel-case or archive-chest; but an equally strong box, exquisitely carved, set with precious gems, and adorned with hinges and lock in splendidly chamfered and chased metal, is equally practical and adequate, but at the same time is a beautiful work of art. So I take it to be with buildings.

Now, you members of this Club will, I am sure, be having great times of enjoyment and excitement, producing works of art in various mediums—pencil, chalk, pen and ink, water-colour, oil, pastel, gouache, not to mention what are known as the arts and crafts; and I ask you not to overlook the delights of etching.

Come and be initiated into the mysteries of the various branches of the art, as have so many of your colleagues, my



friends, at the Central School of Arts and Crafts. All the heavy apparatus, which it is so expensive to buy for oneself, is provided at the Central on payment of a nominal fee. Mr. Burridge, the Principal of the School, himself a very fine etcher, makes it a *sine qua non* before admission that he should see some evidence of draughtsmanship, which you of course could at once supply. All you would then have to do would be to provide yourself with an etching needle, a burnisher, and a scraper, one or two boxes of ground, a bottle of stopping-out varnish, another of rebiting varnish, some tracing paper, blotting paper, rags, and a piece of copper or zinc plate, and, your drawing in hand, you will be ready to start. War conditions have closely restricted the obtaining of metal plates; but by successfully bringing into our service, as supplementaries, iron, steel, lead, and celluloid, we have been able to carry on.

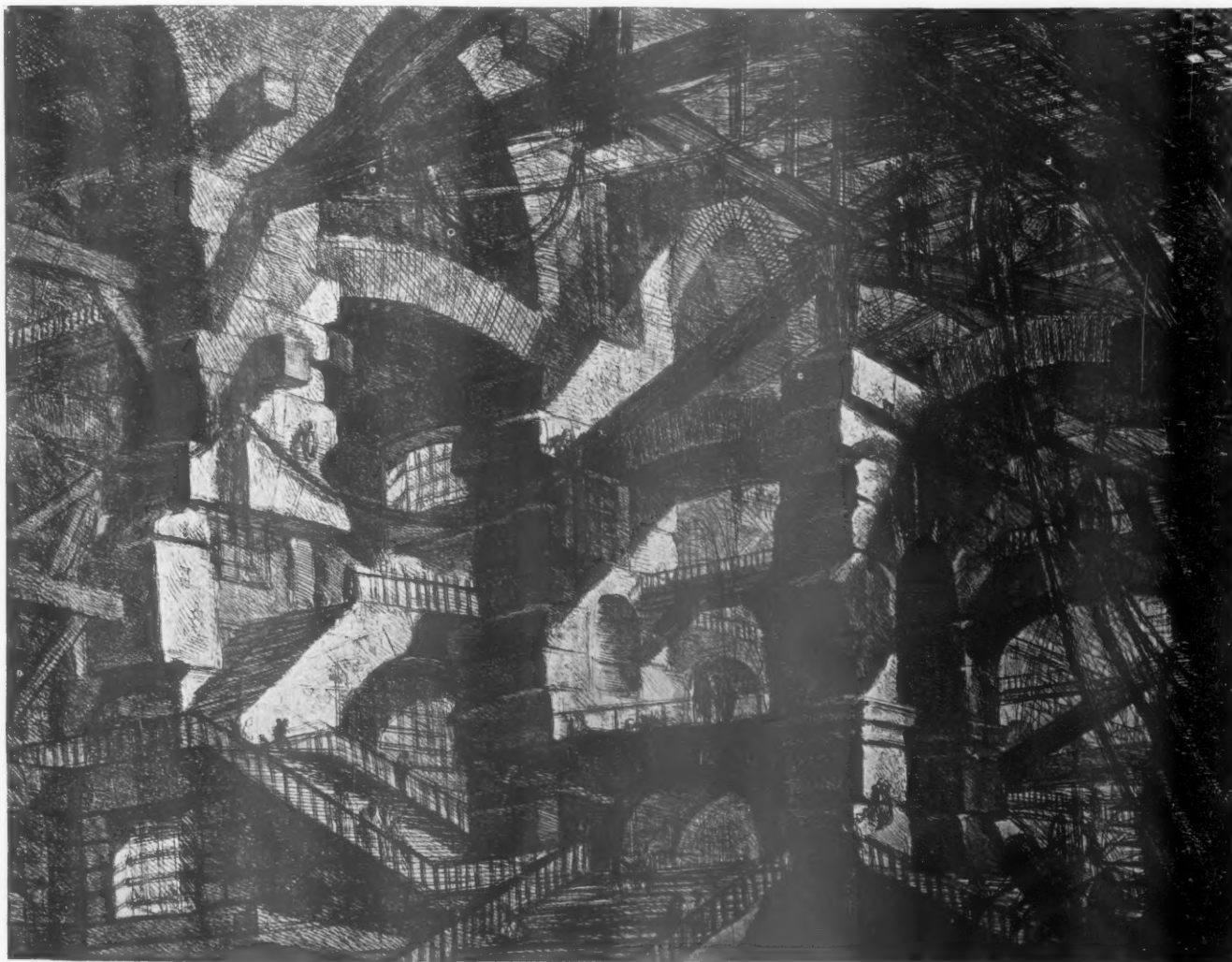
We cut your piece of metal to the exact shape of your sketch by means of a dangerous instrument called a guillotine. You then bevel with a file and burnish its edges to prevent its cutting the paper or press-blankets when being printed. You then remove all grease from the polished surface of the plate with ammonia, whitening, and water. You then heat your plate on a steel box beneath which is a lighted ring-burner. You take your disc of ground, which is composed of white wax, bitumen, and pitch, and draw it, melting some of it, across the surface of the rapidly heating plate; you then take a silk or kid-covered dabber, and, before the ground bubbles with heat,

dab it down evenly all over the surface. While it is still warm pass your plate, now held in a hand-vice, through and through the flame of a gas-fan or bundle of tapers in such a way as to blacken the ground and give it a polished appearance without burning it. The object of this so-called smoking of the ground is to render it more resistful still to the attacks of the acid to which you will subject it, but mainly to give you an even black ground on which the lines you make with the needle will show up in glittering copper.

While your plate is becoming cold, you damp the back of the tracing you have made of the outlines, and when the moisture of your design has quite permeated it, place your plate face upwards on the bed of your roller press, put the pencilled side of the tracing on top of the plate, and pass it through the press. Your outline sketch is now firmly transferred to the copper, but reversed, of course. To facilitate reference to your original drawing, therefore, you examine the latter with a mirror.

You now proceed to needle your design into the copper, taking care to pierce the ground.

Having completed the needling, you paint out with brunswick-black or stopping-out varnish the back of plate, and any blemishes in the ground or in your needling which you do not wish to print black. You will remember that the acid will bite into the copper wherever it is exposed, wherever there is no protecting ground or varnish, or wherever they have been



FROM THE CARCERI SERIES OF ETCHINGS BY PIRANESI.



pierced by the needle. Three parts nitric acid to five of water is used for copper, one part to seven for zinc.

Now, it is evident that different depths or thicknesses of line are required in most black-and-white work—pale, fine lines or tones as a rule in skies and distances, resonant and powerful ones in foregrounds or where dark colour is to be rendered.

It therefore follows that you must prevent the acid biting into the fainter lines for too long, for the deeper and broader the line is bitten, the more ink it will eventually hold and the blacker it will print. So you lift the plate out of its porcelain bath as soon as you judge by rather illusory appearances of sight and touch (experience teaches) that your faintest tones are bitten deep enough, you dry your plate with blotting paper, and protect those portions of your plate from the further rapacity of the mordant with a coat of stopping-out varnish. That dry, you replace your plate in the bath until the next lightest lines are sufficiently deep, and so on until you feel that your strongest lines are black enough, or until perchance the ground begins to break—that is to say, until the barriers of protected copper between your needled lines or dots begin to break away and tend to form a shapeless depression.

Having cleaned both back and front of your plate with soft rag and turpentine, and finished off with powdered leather, you are ready to take your first proof.

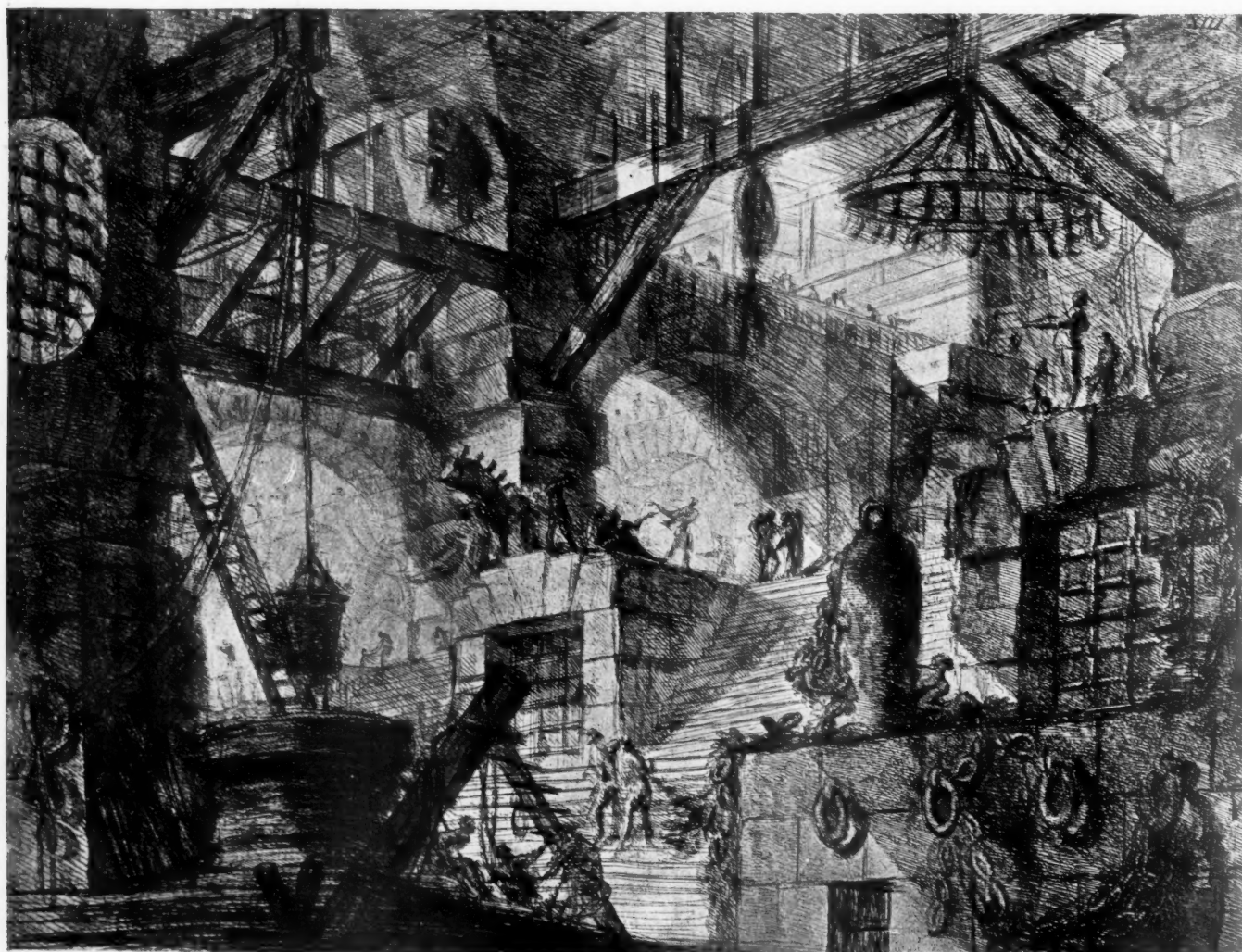
You will have some powdered printing ink, of which there are several kinds, with whose particular qualities you will

become acquainted, and will mix it with oil on a stone slab with a pestle. You will take some of this ground ink, from which all grit has been expelled, on a knife, and transfer it to a large dabber, which you will employ to force the ink into your incised lines, the plate meanwhile having attained considerable heat on the heater.

The plate evenly covered with ink is then allowed to cool, and having made a couple of pads of printing muslin, you place the plate on the jigger (a box with a flat wooden surface) and proceed with semicircular wipes to remove all superfluous ink—that is to say, all ink that is not ensconced in the etched lines; you complete this wiping with the second and cleaner pad of muslin. You now heat your plate slightly and take a piece of evenly damped paper, place your plate on the bed of the press face upwards, put your piece of paper face downwards on top of it with another piece (called a backing paper) on top, pull the press blankets to soften the pressure of the steel roller over all, and turn the press. Remove the paper gently from over your plate and—moment of moments!—you will see your first proof!

The process takes long to explain, but it should not frighten you when I tell you that picking up the threads of etching again after a lapse of a quarter of a century, I designed, traced, needled, bit, and printed my first new plate—a sailing-ship in a heavy sea—within the space of two hours.

Of course, almost invariably there are alterations and



FROM THE CARCERI SERIES OF ETCHINGS BY PIRANESI.

additions to be made; lines that are too aggressive can be closed up a bit by using the burnisher, those that should be removed altogether can be scraped out, and the marks made by either of these tools erased by various means. Lines may be added by putting a fresh ground on, adding fresh needling, and then proceeding as before. One's original lines if too faint may be rebitten *en bloc* by an ingenious and delicate process. In fact there are plenty of interesting little wheezes and stunts to be learnt in order to meet emergencies, not to mention varieties of method, such as using a heated Dutch bath of hydrochloric acid, needling and biting one tone at a time, and so forth.

At the Central one has the great advantage of learning the printing as well as the etching of plates. During the War many distinguished Belgian artists, several of them officers commissioned by their Government to paint at the front, have availed themselves of the opportunity to learn etching, to

further their knowledge of the art, or to learn to print. For in Belgium the restrictions of the Printing Trade Union forbid the artist to print, just as I hear that here the Lithographic Trade Union restricts the lithographic art student, which leads me to diverge for a moment. We have been given over to the tyranny and impositions and handicaps of trades unions in nearly every direction; let us hope that the buying of party votes by the granting of concessions is a form of bribery which will now cease. Capital and labour are always at war, but whichever wins, we, the public, lose, just as we shall do in the coming contests between bureaucracy and Bolshevism. We must cease being inert, and combine, and so defy fanatical extremes.

Soft-ground etching, which should be very popular with the devotees of soft pencil or chalk work, is drawn with a pencil on a piece of grained paper—tracing paper is excellent for the purpose—stretched tightly on top of a plate already coated with



NARTHEX OF THE CHURCH AT AIRVAULT, FRANCE.

From the Etching by Frank Brangwyn, A.R.A.



soft ground. The pressure of the pencil causes the paper beneath every mark to pick up and remove the ground in a granulated form. Wherever the ground has been thus removed the acid will bite similarly as in a needle scratch, and one proceeds as in that case. The print looks just like a toned pencil or chalk drawing in a sunk mount. I have also succeeded in printing direct from a pen-drawing by this process.

Dry-point is not, strictly speaking, etching any more than is mezzotint. The word "etching" is, I believe, derived from the Dutch "etsen," to eat or bite, but in neither of these processes, when used pure, is the acid used.

The dry-point, which is a heavy needle, merely scratches into the plate to the required depth. The result of this treatment is to give a fine or heavy line according to the pressure used. The furrow made much resembles that made by a plough, the copper representing the earth thrown up on either side, producing a burr, which gives a fine, rich, velvety effect to the print. Where this burr is not required, as in very fine lines, it may be removed with a careful touch of the scraper; in any case it very soon wears down, so that a dry-point yields very, very few satisfactory proofs unless it be steel-faced. Steel-facing is the depositing of an infinitesimal coating of steel by electrical methods. It can be applied to most forms of etching, though without its aid etchings proper will generally yield some hundreds of proofs before any great deterioration sets in. Most of the magnificent plates executed by my friend Muirhead Bone have been done in dry-point.

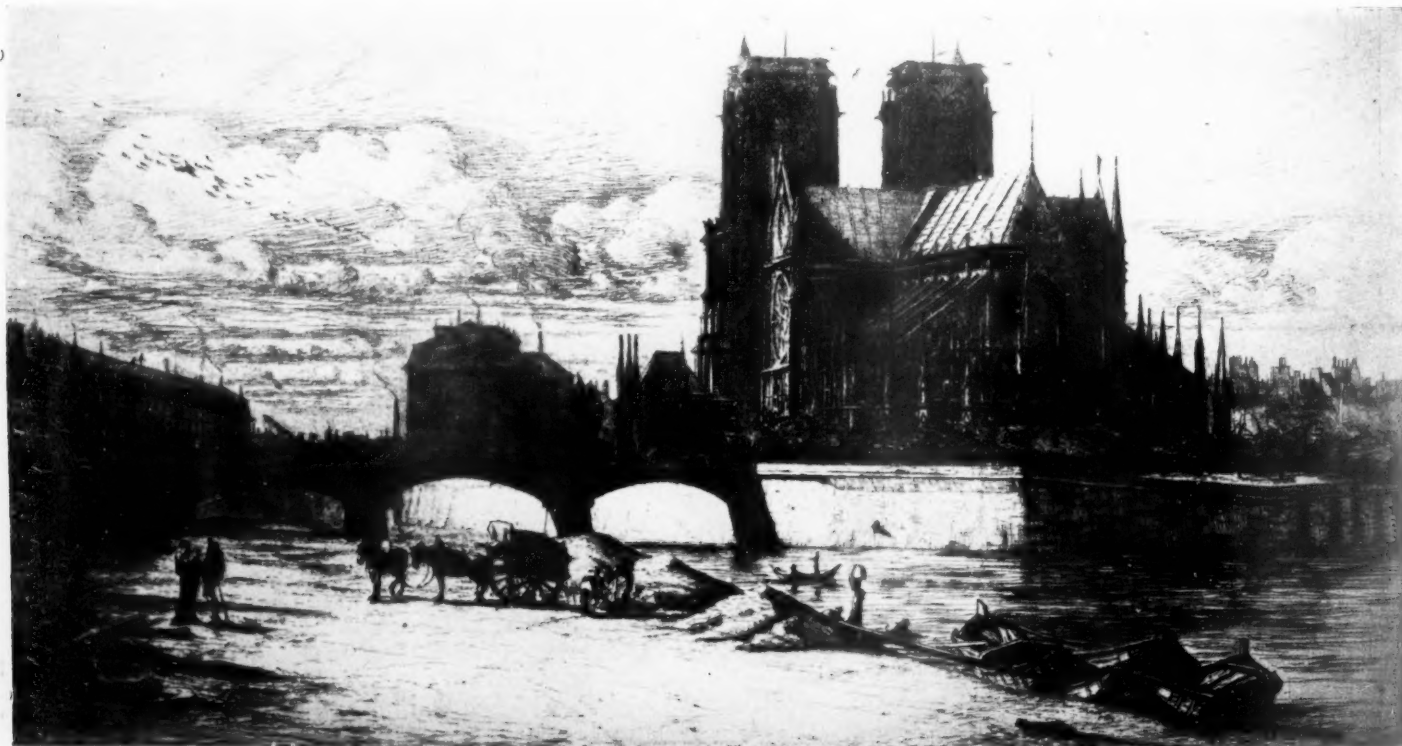
I do not propose to go minutely into the processes of aquatint and mezzotint; but perhaps I may say this much—that by means of aquatint may be obtained wonderful prints that give one at will all the delicacy or all the strength of monochrome wash paintings, and if printed in coloured inks by means of superimposed plates, or by the careful colouring of a single plate, will give the effect of a water-colour painting.

Briefly, an aquatint plate is covered with a ground of asphaltum or of resin applied in the form of falling dust, every speck of which will prevent the acid biting the infinitesimal area of copper on which it has fallen. Tonal areas in their succeeding grades of intensity are in the aquatint protected from the hunger of the acid by painting out, just as were sets of lines in etching—in each case the darkest portions being left longest in the bath. There is also an older method of laying an aquatint ground in liquid form, in which evaporation plays a great part.

Sand-paper ground plates are a variation again. An ordinary etching ground is laid, and a piece of sand-paper passed through the press several times over it, the sand granules each taking off its speck of ground. The bared dots are then bitten in or stopped out as before.

Mezzotint, which yields to able hands and brains splendid prints of a surprising depth and mellowness of tone, entails a rather tedious process. The surface of your plate has to be pitted all over with infinitesimal, evenly distributed, evenly sized, holes. To accomplish this a tool provided with tiny closely set teeth is rocked in a slow and regulated advance all over the plate, not once, but several scores of times. An instrument is used that will enable one to cover the surface at a slightly different angle each time, so that no tooth should fall on the same spot twice. When the plate is sufficiently densely pitted it should, if plied with printing ink, deliver a dense black proof. To produce one's design, however, one has to scrape down towards unrocked copper again; the more one scrapes, the nearer to white one will have attained in the resultant print. Mending is often done with a roulette, a tiny spiked wheel, working much like a revolving spur. Outlines in aquatints and in mezzotints are frequently put in in pure etching. Etching is sometimes mixed with dry-point or engraving, which is done with a wedge-shaped graver, and so forth.

Piranesi is one of the giants of black-and-white work,



THE APSE OF NOTRE DAME, PARIS.

*After the Etching by Charles Méryon.*





THE TOUR DE L'HORLOGE.

*After the Etching by Charles Méryon.*

renowned not only for the power and beauty of his work, but for the gigantic size and number of his plates. It is true that in order to cover huge areas of metal he or the apprentices he employed became occasionally mechanical in technique, but his great set of the *Carceri* or *Prisons* is magnificently needled, and is full of boundless imagination and awe-inspiring effects.

As I have said, many of Piranesi's prints are of great size, yet they are highly approved by the very etchers and experts who positively detest the etchings of our great living genius, my friend Brangwyn, chiefly because of *their* great size and correspondingly heavy line work. Yet Brangwyn is never mechanical, though he entrusts too much to able printing to satisfy a mere purist.

Those critics who would dominate the whole art with hard-and-fast rules harp on Whistler's dictum about the excessively fine point of the needle being only suitable for fine lines on small plates. It is, however, forgotten that the *essence* of

etching lies not in the depth of the initial scratches, but in the varying strength given to them by length and depth of biting.

Even if this were not so, it is true that both needles and the garden rakes with which they laughingly accuse Brangwyn of etching are points, each commensurate with the area of the surface it is desired to cover. After all, the most minute miniature and the hugest gallery painting are alike painted with brushes composed of mere hairs, and no one dreams of dismissing either one category or the other with ignominy from the legitimate realms of painting on the score of scale. The same reasoning can be applied to lithographs, which have only recently attained enormous areas, and yet are *not* denounced therefor by these critics. Brangwyn's work is positively revered all over the Continent, and the attitude of many of our cognoscenti here simply baffles the art world abroad.

The fact is that our critics here have pigeon-holes distinctly labelled for easily distinguished breeds, but when a pigeon comes along of an unaccustomed type, but outpointing all others, there is no label for his kind; he is therefore not a pigeon, and must be stoned.

There is too much narrow-mindedness of similar descriptions in connexion with the criticism of prints, whereas overbroad-mindedness in connexion with painting has developed into mad anarchy.

The splendid mezzotints by the great English masters of the art, which are frequently selling for even more fabulous sums than the original paintings of which they are the translations, are the joy and pride of our critics; yet the magnificent translations done, say, by the great French etchers of the last century are treated by them with contempt, merely because, as they say, they are reproductions, or,

as I prefer to call them—in respect for the difficult problems set and overcome—translations.

Much the same contempt is bestowed on any print, however excellent it may be and however good the impressions, which has appeared in a publication.

Méryon is considered with Rembrandt and Whistler one of the greatest etchers of all time. He did some most dramatic plates, many of them needled in an exquisite though very ordered manner, suggestive of the burin or graver. Despite the occasional introduction of weirdly incongruous details foreshadowing the madness of which the poor neglected genius eventually died in a garret, his fame can never be extinguished.

[Mr. Emanuel, in the course of his most interesting and instructive lecture, referred to the work of some scores of etchers of all periods and all nationalities. Unfortunately we have insufficient space to reproduce the full text of his critical analysis.]

# ART AND THE ANTIQUE.

BY MARIUS IVOR.

IN Art, restorations can have no exclusive reference to the past. With past and present in our mundane relative sense the artist is not concerned. A particular appeal is not dependent on its distance from us—as we should say, its antiquity—but is due solely to the independent emotions that a particular point in time is capable of arousing. Art, like philosophy, conceives time as pure quality.

The artist exchanges mere historical significance for an intuitive experience of past states. Archæology and history are one, concerned with the antiquity of the present; Art experiences the modernity of the past and all the emotions unique to the time. Plutarch wonders at the structures raised by Pericles, "built in so short a time, and yet built for ages: for each of them, as soon as finished, had the venerable air of antiquity; so, now they are old, they have the freshness of a modern building. A bloom is diffused over them, which preserves their aspect untarnished by time, as if they were animated with a spirit of perpetual youth and unfading elegance." Or, as Walter Pater wrote so much more succinctly, "in Greece all things are at once old and new." It is this truth the artist feels when he expresses the past, and he does not recognize any of our nice modern distinctions between classic and romantic. Whatever he materializes must ever be infected with a contemporary spirit, and, as conveyed by him to our understanding, the antique world becomes at last our own world.

We must judge all Art by something more than facts, and a work of art inspired by the past cannot be explained as an archæological document. Whatever the degree of correctness, its value does not depend on correctness. Tolstoy well expressed this when he defined the business of Art to be, "to make that understood and felt which in the form of an argument might be incomprehensible and inaccessible."

This does not mean that an artist may ignore facts as he chooses, but that his own ideas are not to be subordinated to what is actually known or presumed to be known. Ideas are a new phase of truth. Not a compilation of minor details,

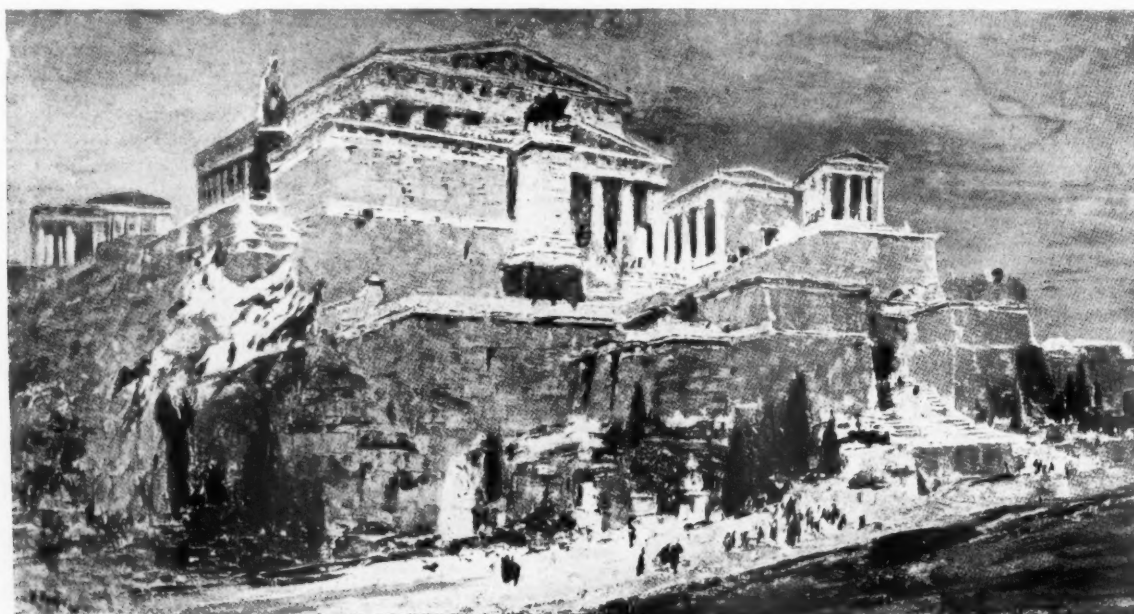
however considerable in their total, but the truth of the whole is the test, and that truth will depend on its being no reflection of any previous conception. Let Art be crystalline in its sincerity and it will pass beyond the criticisms of history and science, for the artist will refuse to sacrifice his inspiration to the cold aloofness of research. Archæologists may hesitate to go beyond certain limits imposed by their material. But an artist's conception is an inspired synthesis of assumptions that, given æsthetic form, suddenly reveal a meaning denied to analysis and the mere sifting of evidence. Theories would remain theories but for the artist's capacity to visualize and give unity to ideas.

Art, indeed, finds itself in full where history loses itself in the remote places of space and time. For pure Art is only possible when the sole allegiance is between the artist and his inspiration. To every artist come visions of the past that have no origin in chronology but are none the less tangible impressions. There may be as deep an inspiration of the Heroic Age as that of Augustus, and Homer can mean more than either Athens or Rome, the Iliad and the Odyssey wonderful compensations for actual monuments. An artist's instinct for the truth enables him to divine as authority what does indeed tend to become not less but more definitive as we bridge the gap that separates the age of myth and legend from the beginnings of the historical period.

\* \* \* \* \*

In illustration of the above words we need not ask for any wider range than that covered by these two restorations by Mr. Walcot. Of the beginnings of Republican Rome we know comparatively little: of the last phase of Imperial Athens we know much; but in each case a definite vision has been realized.

The artist shows us the Acropolis about the time of Hadrian, under whom came the last great impulse to the twilight of a still supreme Athens. We are confronted once more with that crowded little mountain-top that underwent



VIEW OF THE ACROPOLIS, ATHENS, SOON AFTER ITS RESTORATION BY AGRIPPA OR HADRIAN.

*After a Colour Drawing by William Walcot.*

(Original now in the possession of Lord Howard de Walden.)



little material change from the days of Pericles to the time of Augustus, and are reminded that the Roman Emperors did not hesitate to implant their own genius among the glorious achievements of the Hellenic age. Not content with Rome, their sense of building was not to be denied in that very city whence they derived so great a fund of inspiration. So we find Hadrian actually completing the great temple of Olympian Zeus, begun centuries earlier by Peisistratus, and feel that any but a Roman would have respected that long repose.

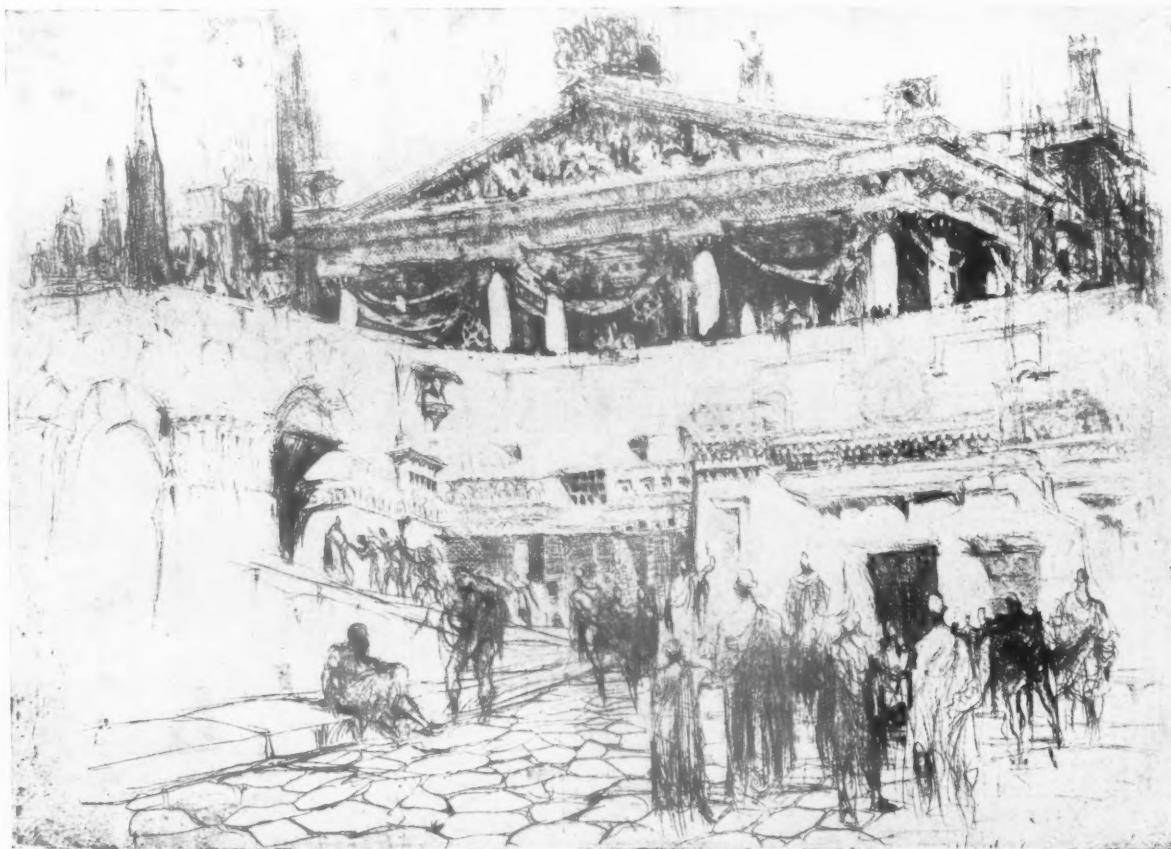
To the Acropolis itself Hadrian probably added little. The great marble stair to the Propylea and the paved wheel-way up to the top were the work of the Cæsars, and these Roman touches do not affect the mountain-like serenity of the great statue of Athene Promachus and the two temples that represent the finest achievements of Greek art—the flower of the antique world: the Parthenon and the Erechtheion. No! the imperial power of Rome could never succeed in quenching the essential glory of Greece that burst forth from the Acropolis like a pale flame.

If Rome does not signify in Athens, neither is it so much Rome as something which antedates Rome that claims us in the etching of an Etruscan temple. The artist insists, not on what we know but on what we do not know. For of the real beginnings of Roman architecture we know very little, because none of the buildings of early Republican Rome have been handed down to us. What we do know of Roman architecture is essentially that of Imperial Rome, which leaves a great deal of which there are no monuments remaining unexplained. Thus of the Tuscan order recognized by Vitruvius there is no ancient example, and the link between the earliest Roman buildings and actual Etruscan models or prototypes is one of the most interesting and difficult problems of architecture.

All the more, therefore, should we welcome an artist's interpretation of the great temple of Jupiter Capitolinus, built by the last of the Etruscan kings, and consecrated in 509 B.C., the first year of the Republic. Its site, the Capitoline, was the most significant of the hills of Rome, and the temple the most sacred shrine of the ancient city. Here the Roman triumphs culminated. Burnt down and restored three times, the original Etruscan temple ultimately became invested with a full imperial splendour, which we must not forget to discount if we would realize the original structure. The temple was preserved down to A.D. 455. It gradually disappeared in the Middle Ages, its site being now marked by the Caffarelli palace.

\* \* \* \* \*

In both these compositions the past in its maturity is seen under the spell cast by the full daylight of antiquity. Both seem to insist on the identity of past and present. The artist, faithful to an inspiration, never the slave of *data*, has not been afraid to commit himself, and it follows that archæological professors will be rather afraid to accept such achievements of unfettered genius. It is their business to hesitate, to weigh; art has its very being in rapid decisions. Science cannot repeat too often, each time reaching greater accuracy; art ever creates anew. Where a final judgment is indefinitely suspended as being unjustifiable, uncertainty and haze creep in. There is a certainty, a conviction, about Mr. Walcott's work which suggests a definite challenge to the archæologist, and makes us feel that whatever the objections, technical or historical, that may be brought forward by purists, art never materializes in vain—especially in the case of an artist who can so subtly reawaken our sense of architecture and strengthen our appreciation of architectural form.



A RESTORATION OF ONE OF THE FIRST TEMPLES OF JUPITER CAPITOLINUS, ROME.

From an Etching by William Walcott.



## A WESTMINSTER MEMORIAL AND IMPROVEMENT SCHEME.

MAJOR PAWLEY'S proposal to create a new city in Westminster as an Imperial War Memorial is perhaps the most ambitious of the many memorial schemes that have been lately introduced to the public notice. Also, it is one that has aroused a good deal of controversy. The arguments for and against it seem to be equally strong, and there are two distinct points of view. On the one side it is urged that besides providing opportunities for commemorative monuments, the scheme would effect a much-needed civic improvement; while on the other it is contended that the project is lacking in the essential monumental spirit—that spirit which is so finely expressed in the Arc de Triomphe in Paris, or the Victor Emmanuel Monument in Rome, for example. There is undoubtedly much force in this argument. To design a monument expressing and symbolizing all that this War has meant to the British race is admittedly a difficult, some would say an impossible, task—one to test to the utmost the creative fertility of our most gifted architects and sculptors; but it is not to be doubted that a central homogeneous composition offers far

more prospect of success than does a town-planning scheme in which the interest is necessarily diverse and scattered.

This is not to say that Major Pawley's projected scheme, or something like it, should not be carried out. That part of Westminster with which he deals is mostly in a deplorable condition, and something must be done with it before many years elapse. The neighbourhood, mainly eighteenth-century in character, and once the habitat of the wealthy, has long since degenerated into a slum. Many of the leases will be falling in within the next few years; and if some new and comprehensive rebuilding scheme is not soon adopted, an unusually fine opportunity for improving London's amenities will be irretrievably lost. Londoners must not stand by and allow this valuable and important area to be rebuilt piecemeal fashion upon its present hopeless lay-out. We are constantly criticizing our civic forefathers' lack of imaginative foresight: let us not pass on to our descendants the same grievance against ourselves.

Major Pawley's scheme, as a town-planning improvement,



GENERAL PLAN OF PROPOSED EMPIRE WAR MEMORIAL SCHEME, WESTMINSTER.

Major Chas. J. C. Pawley, V.D., Architect.



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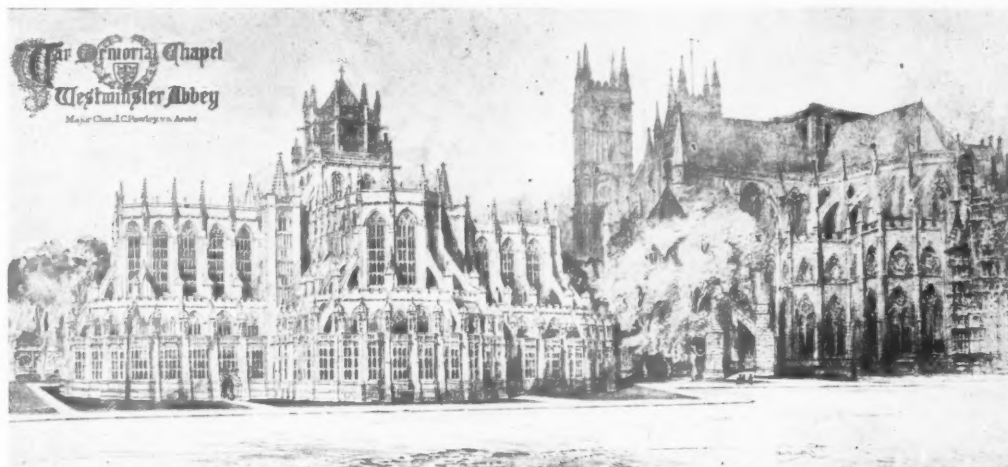
has obvious merits, chief of which is that it provides a new arterial thoroughfare that was badly wanted, connecting (by means of the new Lambeth Bridge) Victoria with a neglected part of South London—an area in which prodigious developments may be anticipated. Also, a new and shorter route is opened up to vehicles proceeding from Westminster to London Bridge.

Major Pawley has prepared designs for various of the new sites that would become available, but these are obviously tentative in view of their author's generous offer of the whole scheme as a free gift to the nation. An adequate description of the project was given by Mr. R. C. Reginald Nevill, B.A., LL.B., at a meeting held in Caxton Hall, Westminster, last month; and from this we extract the following particulars:—

“Major Pawley's general idea is to create in Westminster, in the immediate neighbourhood of the historic Abbey and the Houses of Parliament, a centre and home for Science, Art, and Learning, and to erect buildings dedicated to this great object upon sites which are not only from every point of view the most appropriate that can be found, but are also readily available.

Lambeth Bridge joins the Embankment on the Westminster side to a point at the southern end of Westminster Cathedral practically bisects this triangle. It is to this line I would direct attention. It forms, as it were, the axis of the whole scheme. It may even be continued across Lambeth Bridge, and then, taking a slightly northerly bend via Lambeth Road, it ultimately reaches the London Bridge Railway termini, thus joining east and west the two great railway termini of Victoria and London Bridge. It is Major Pawley's opinion that the execution of his scheme will so increase the land values of the area in question as almost to compensate for the widening of the streets and carrying out the improvement suggested. This, of course, does not relate to the erection of the buildings, which will be undertaken independently.

“Naturally the replanning of this area will displace a part of the population of the neighbourhood; but by an extension of the admirable housing scheme of the County Council which has been started in the neighbourhood of the Tate Gallery, and for which extension there is ample space, the population disturbed by the replanning could be accommodated within a stone's throw of their present dwellings.



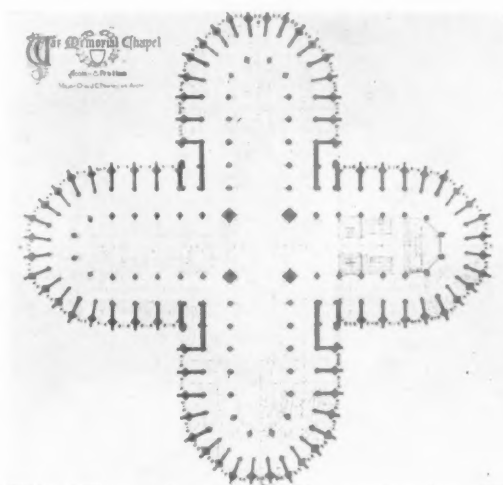
PERSPECTIVE VIEW OF PROPOSED MEMORIAL CHAPEL.

“To carry out this idea, wide avenues and streets will be laid out, and great piazzas or circuses opened up. In these avenues and open spaces memorial groups or monuments may be erected dedicated to the achievements of our fighting forces, and to those of our Dominions beyond the seas. The rebuilding of Lambeth Bridge is also contemplated, designed as a fine memorial bridge and as an approach to this new city from the Surrey side of the river. One of the great features of this scheme is that it offers a unique opportunity for erecting new buildings so urgently needed for the University of London.

“A modern Ordnance map will show the area clearly. It will be noticed that by taking Victoria Street, Vauxhall Bridge Road, and the river embankment, we have roughly an equilateral triangle. At the angle which points to the west we have Westminster Cathedral, at the northern angle Westminster Abbey, and at the southern angle the Tate Gallery. Now, a line drawn from a point at which

“Now the position with regard to this particular area is as follows: The County Council have in view, I understand, a further improvement of the Embankment. Lambeth Bridge is practically unsafe and useless in its present condition, and has to be rebuilt. The County Council have further, I believe, a

scheme under contemplation for widening the approaches to the railway termini at Victoria Station, one of the most urgent and necessary improvements to be carried out after the termination of the War. The question therefore is, what is to be done with the intervening area—that is, the area within the triangle which I have indicated? Something will be done, and that shortly, because many of the leases are falling in within the next few years. The decision has, therefore, to be made within a very short time as to whether a really comprehensive and dignified scheme of replanning is to be adopted such as that which I propose to show, or whether this area is to be let for



PLAN.

uncontrolled development to private speculators. If, then, a scheme of replanning such as is now suggested be not adopted very shortly, the chance may be lost for ever, and the opportunity may never recur of reconstructing this area in a manner worthy of and consistent with its proximity to the heart of the Empire. If the scheme as now put forward is not considered appropriate, then the anxious and compelling inquiry, 'What is to be done with this area?' still remains unanswered. It is none the less a question which must receive a satisfactory solution if Westminster is to preserve its dignity and self-respect as the City of the Empire.

"The ground plan gives the outline of the principal sites for the proposed buildings, and shows also the main arteries of thoroughfare with the open spaces at intervals. The principal avenue, which is to be 120 ft. wide, follows the line already indicated running from Lambeth Bridge to the south end of Westminster Cathedral. For the purpose of explaining the scheme it is convenient to give this avenue a name, for which the 'Empire Avenue' will serve till a better be found. It is suggested that the 'Empire Avenue' should be continued across the river by the Memorial Bridge to take the place of Lambeth Bridge, this bridge being, like the avenue, 120 ft. wide and flanked by groups of statuary. The open space where the new bridge joins the Embankment offers a site for a memorial, and in like manner the circuses in the 'Empire Avenue' provide sites for similar memorials which can be dedicated to our fighting services and to the troops of our Dominions. There are also other circuses in the tributary streets to the main avenue, and the scheme even contemplates the replanning of the Vauxhall Bridge Road area, so that further sites for monuments are offered here. It should be borne in mind that even these tributary or collateral avenues are designed as noble thoroughfares only a trifle less ambitious in design than the 'Empire Avenue' itself, so that the new city would be laid out on a scale to which no other part of the metropolis can bear any comparison, and which may well rival or even surpass any other city in the world.

"Allusion has been made to the site for the University buildings of London. The site suggested is shown on the plan on the south side of the 'Empire Avenue' with a frontage to the River Thames. The river frontage of the site is 960 ft., and the frontage to the 'Empire Avenue' 1,390 ft., giving a total area of approximately 15 acres.

"It is very difficult to conceive any site in London where the University buildings could be placed to greater advantage. Apart from the dignity which any fine building must gain by possessing a river frontage, and by being situated at the junction of the Memorial Bridge with the Embankment, there are

the associations which the University will acquire by reason of the close proximity of the Houses of Parliament and Westminster Abbey. In addition, this site possesses an altogether unique advantage in so far as it is here possible to add to these associations by creating the surroundings of the University and by erecting in the immediate neighbourhood other buildings dedicated to the services of the sciences and the arts. Of all buildings a University makes the most powerful appeal for approximate and harmonious surroundings and associations. On this site the University would be in intimate relation to the great associations and traditions of the past, and in the midst of a city whose construction is to represent and embody the combined and supreme efforts of the architects, sculptors, and other artists and artificers of the nation.

"Nothing could be more appropriate than that this city of learning and enlightenment which the scheme contemplates should contain provision for making good some shortcomings in our national life. Hence it is proposed to provide a theatre dedicated to Shakespeare, and specially designed for the performance of his plays and other classics of British drama, a noble hall for the presentation of the great masterpieces of music, and a great gallery worthy of contemporary British art. Major Pawley has already designed or has in hand the elevations and plans for all these buildings.

"This, it is suggested, should be one feature of the Memorial City. It is an adjunct, as it were, to the University. It is essential to make the scheme of intellectual and artistic education complete. With the lectures, libraries, and laboratories of the University, this provision for drama, music, and the plastic arts will make Westminster the fountain-head of a liberal education.

"There is yet another feature of the scheme which is of equal importance to the aims which have already been formulated. There are few of our great engineering and scientific institutions with homes of their own. Such impor-

tant bodies as the Iron and Steel Institute, the Institute of Mining and Metallurgy, the Institute of Metals, the Institute of Mining Engineers, the Society of Chemical Industry, the various gas institutions and associations, and a number of smaller societies, are without a suitable home where facilities for holding general and committee meetings are available, and where provision is made for library or even laboratory accommodation, and for similar conveniences essential for the pursuit of scientific knowledge. It is also most desirable that these institutions should be so placed that they are in a position to maintain an intimate relation with the University. They have a very real interest in encouraging and keeping in touch with post-graduate scientific research and in watching over the training in the expert



EAST ARM OF PROPOSED MEMORIAL CHAPEL.



scientific knowledge which will guide the future destinies of the great industries they represent.

"The suggestion is that the sites which will be available under this scheme will provide these institutions whose welfare is essential to the national industry and commerce with the opportunity of acquiring the accommodation which is so urgently needed. Considering the national importance of the functions discharged by these institutions it may well be urged that after the University their claims on these sites should receive preferential consideration.

"Bearing in mind the description which I have given of the scheme, I wish particularly to call attention to the perspective or birdseye view of the new city (see Plate IV). It is the key to the whole scheme. First notice the 'Empire Avenue' with open spaces for monuments. Then on the south side of the 'Empire Avenue' will be seen the site for the University buildings, giving these buildings the perspective. On the opposite of the avenue are the sites which will be in every way suitable to the scientific institutions referred to. By the avenue opening out of the first circus in a northerly direction Victoria Street is reached by Strutton Ground. Major Pawley has designed the buildings for the Victoria Street entrance to Strutton Ground, which will also be the Victoria Street approach to the new city.

"Continuing along the 'Empire Avenue,' we come to Vincent Square, which is of course to be preserved as an open space. On the far side of Vincent Square is a great picture gallery, which will have a frontage both to Vincent Square and Vauxhall Bridge Road, and would be the first building to open up the development of the latter thoroughfare. Major Pawley contemplates the sites for the Shakespeare Theatre and the Memorial Concert Hall as in the area near Strutton Ground. There is also in close proximity to Westminster Abbey the Gothic War Shrine, with its cloisters, which Major Pawley has designed. This, then, is the conception of our new city. Major Pawley has suggested Portland stone as the material in which the city is to be built, and that everything in design, execution, and material is to be of the very best available.

"In order to make Westminster one great and harmonious whole, Major Pawley has thought it desirable to present designs for filling in a site where the present buildings are not in harmony with the dignity of the city. A building which he has designed for the purposes of the proposed War Museum or for Government Offices, he proposes to place between the United Service Institute by Inigo Jones and Mr. Norman Shaw's Scotland Yard Buildings. Major Pawley's suggestion is that the present United Service Institution should itself form a wing of the building, and that Inigo Jones's design should be followed out through the rest of the building. These designs are, however, auxiliary to the main scheme, which radiates round the 'Empire Avenue,' and they are not necessarily an integral part.

"More closely associated with the main scheme is Major Pawley's design for a War Shrine within the immediate neighbourhood of the Abbey. His idea has been to erect a Gothic building where light is to be the dominant note. Bearing this in mind, attention is directed to the three tiers of windows. In these windows almost infinite scope is given for stained-glass designs. Each window might even be a separate memorial. Major Pawley is indebted to Mr. Hallward for designs for three windows. The interior of the Shrine contains seventy-eight recesses, each of which is designed as a Memorial Chapel capable of dedication to those who have fallen in the War. Outside the Shrine provision is made for cloisters also to be devoted to memorials. The Shrine itself is designed to be a temple of the heroes of this War, and is dedicated to their memory."

## WATCHERS ON ST. PAUL'S.

THE story of the men who have been guarding St. Paul's Cathedral against air raids during the Great War forms an interesting episode, of which some record should be preserved. By a stroke of good fortune the years immediately before the War saw the installation of a new and elaborate scheme of fire-prevention in the building, making it as safe from fire as is humanly possible. Protection against incendiary bombs was all that could be afforded it, though we believe that expert opinion tended to the view that the effect of explosive bombs, other than those of the heaviest type, might not be very serious.

The Watch was organized in 1915, and has been kept in being during the larger part of the War, by Canon Alexander, treasurer of the Cathedral, and Mr. Mervyn Macartney, the architect, assisted by the clerk of the works and Mr. L. A. Turner, who has been indefatigable in his services as secretary. It has consisted of architects and other professional men, with guides, vergers, and workmen belonging to the Cathedral staff. These men, trained by the London Fire Brigade, have been on guard every night for more than three years, ten or fifteen being often present at one time, and stationed (with fire-hose ready) at the posts allotted them, when a warning was received. Many have attended two or three nights a week, and the whole country owes them a debt of gratitude for their devoted service. Through the cold and dark nights of three winters these men have been on guard in the national Cathedral, often compelled, if a late warning came through, to spend the whole night there between two busy days of work, beds being provided for such sleep as they could obtain. A system of telephones from the crypt to the various roofs has made for united action.

It was in September 1915 that the danger to the Cathedral first became pressing. At a quarter to eleven on the night of 8 September a Zeppelin was seen by the watchers on the roofs approaching rapidly from the west in the glare of the search-lights, and a great fire began in Wood Street, in the close vicinity of the Cathedral, which for two hours and a half illuminated the whole building, while thousands of people hurried up Ludgate Hill "to see St. Paul's on fire." On two other occasions—in June and July 1917—the Cathedral had very narrow escapes from the bombs of Gothas flying in broad daylight. Twice it was struck, at night, by anti-aircraft shells, one of which penetrated, with great force but comparatively little damage, the roof of the South Transept. On 13 June 1917 a small part of an explosive bomb which fell within a few yards of the north side of the building was thrown up on to the Stone Gallery, where a slight dint was made in the asphalt by the impact of it. This is the only mark which Germany has left on St. Paul's Cathedral.

In some instances, repatriated prisoners from Germany are, it is said, very much surprised to find that the Cathedral is still standing, for they had been assured of its complete destruction.

Late at night on Saturday, 9 November, on the eve of the armistice, Canon Alexander, who is said to have missed only one of the raids on London, paid a last visit to the Watch. The men on duty were reported high up above the dome, looking out across the City from the Golden Gallery. The Lord Mayor's Show had passed by during the day with tumult and shouting; but now in the deserted streets everything was still. Between the river mists and the quiet stars Wren's great masterpiece, untouched by the ravages of a cruel war, stood out safe and serene.



## OBITUARY.

MAJOR J. M. W. HALLEY, R.E. (F.R.I.B.A.).

It is with a deep sense of personal loss that we record the death in action of Major J. M. W. Halley, R.E. (F.R.I.B.A.), who, in the days before the War, was a frequent and valued contributor to the publications associated with Technical Journals, Ltd.—particularly *THE ARCHITECTURAL REVIEW*, wherein he wrote many delightful articles, including most of the essays that appeared in connexion with "The Practical Exemplar of Architecture."

Major Halley was born in Glasgow forty-one years ago, and was educated at Hillhead High School. He served his architectural apprenticeship with Messrs. Leiper and Messrs. Burnett. He came to London about twenty years ago, and worked in the office of Messrs. Niven and Wigglesworth for a few years, after which he became assistant to Mr. Mervyn Macartney, Surveyor to St. Paul's Cathedral. He was well known among architects for his deep and intimate knowledge of English Renaissance architecture, and his skill and ingenuity in applying that knowledge to modern design. His design for The Hague Palace of Peace, for which he received one of the awards, and his design for the new Mitchell Library at Glasgow, which was placed on the short leet, were his most sustained efforts. A small house which he built for himself, and named "The Ship," in the Garden Suburb at Hampstead, aroused a good deal of professional interest.

He was deeply interested in St. Paul's Cathedral, and under Mr. Macartney he was intimately associated with the fine work of the Chapel of St. Michael and St. George. He wrote a very interesting paper on "The Rebuilding and Workmen of St. Paul's Cathedral from the Accounts," which received the R.I.B.A. prize in 1914. He had also completed a book on Piranesi, which it is hoped will be published. We agree with a writer in "The Glasgow Herald," that Halley's deep knowledge, fine taste, and great industry would have brought him high distinction in his profession if he had lived. He was twice married; his second marriage having taken place on his last visit home.

Particulars of Halley's brave end have now reached the family from a brother officer. The writer says: "After the glorious victory of the Lys, in which the three field companies of this division had excelled themselves, they moved forward to the Scheldt. . . . On the early evening of 24 October, Major Halley and another officer crawled out to the river bank to have a look at it; suddenly a sniper fired at them from the other bank, instantly killing the Major. His companion lay still for two hours and was fired at repeatedly, but not hit. Major Halley's body was afterwards recovered. The funeral service was held at the graveside, and was very impressive. There was a firing party of our



The Late  
MAJOR HALLEY

men, a bugler to sound the 'Last Post,' and four pipers from a kilted battalion played the 'Flowers of the Forest.' The divisional commander attended, with many staff officers and representatives from the different infantry battalions of the division. A neat wooden cross is being erected to-day. The wood for this cross was taken from some oak beams in an old windmill—this we thought appropriate for the Major, who was a great admirer of these weird-looking structures, which are so characteristically Flemish. We all felt when we left the cemetery that we had done full military honours to a gallant officer and true gentleman."

Halley was wounded last year at Arras, and while on convalescent leave in London he called in to see us. Strange it was to see that one whose fad it had been to pose as a "languid and limp young man" at such æsthetic haunts as the Chelsea Arts Club should have changed into the alert, smart soldier he became. We saw him again (and for the last time) only a few weeks ago, just before he returned to France from a short leave. Halley, with his handsome appearance, dry humour, and imperturbable good-temper, was a prime favourite wherever he went, and to us it is inexpressibly sad that his smiling presence will cheer us no more.

PENDEREL-BRODHURST.—Killed in action on 1st October, Bernard Richard, 2nd Lieut., Royal Engineers.

THE above announcement records the death of a splendid young man and a most promising architect.

Bernard Richard Penderel-Brodhurst, second and only surviving son of James Penderel-Brodhurst, editor of "The Guardian," was born on 4 October 1890. He was educated at St. Paul's School, and in 1910 was articled to Mr. Mervyn Macartney, F.R.I.B.A., architect to St. Paul's Cathedral. Three weeks after the outbreak of war he joined the 13th London (Kensingtons), was promoted to be corporal in three days and sergeant in seven weeks. He exchanged into the Artists' Rifles, and from that corps obtained a Commission in the Royal Engineers in July 1917. In April of 1918 he went to France; was wounded in June, but did not leave duty. On 1 October, as he emerged from a communication trench, he was shot at by a sniper, who missed him. He turned to his officer companion with a smile, and the next instant he was shot through the head. He lived, unconscious, for three hours, and died with the smile on his face.



The Late  
2nd LIEUT. PENDEREL-BRODHURST.

Such is the record of Brodhurst's life, or rather such are the bare facts. Those who knew him could add so much. Letters from his brother officers voice what all his friends felt of him, and would themselves have said.

"His men adored him, and would have followed him anywhere," writes the officer who was at his side when he was

killed; and, another: "His was the best type of bravery. He knew what shells and bullets could do, and feared them accordingly, but it never made any difference to the carrying out of his work." "We loved him, and revere his memory. We have lost a big soul in him, who gave his all for the cause." What could be added to words like these?

His talent for architecture may have been inherited from his grandfather, the late Humphrey Baker of Colchester, architect of the Friends' Meeting House in that town, who also did much church restoration in the district. When he entered Mr. Macartney's office he brought with him certain definite convictions as to "the styles," and those who worked with him soon became aware of his profound knowledge and love of the Byzantine, Romanesque, and Gothic methods. Thus equipped he wasted no time making up his mind, but went straight ahead with his work, which was entirely free from any vagueness or lack of decision. Undoubtedly he would have made a fine architect. Much of his work as a draughtsman appeared in the "Practical Exemplar" of THE ARCHITECTURAL REVIEW, but he did not belong to the school of flashy draughtsmanship or the winners of the great prizes. Brodhurst would never have won the "Prix de Rome," but he might well have built a Reims Cathedral. He possessed all the sensitive imagination of the mediæval craftsmen and all their absorption in one great ideal. He was a real mediævalist, one might almost say body as well as soul, for somehow his magnificent physique recalled those mighty crusaders who lie in the Temple Church; and it was in their spirit that he entered into this war.

His architectural knowledge made him specially valuable to the Royal Engineers; and he devised a light bridge, twenty feet long, light enough to be carried by one man, but strong enough to bear three men at once.

He was heir to the perpetual pension settled upon his ancestor, Humphrey Penderel, in 1665, for his services in concealing Charles II, and aiding his escape after the Battle of Worcester.

Brodhurst died within three days of his twenty-eighth birthday, and the first anniversary of his marriage to Miss Winifred Swain. His chaplain's words sum him up: "He was a sound man through and through."

W. G. A.

## CORRESPONDENCE.

MR. DAVIDGE'S MAPS OF OLD LONDON.

To the Editor of THE ARCHITECTURAL REVIEW.

SIR,

Mr. Davidge's maps of Old London are very interesting, but should not his Tudor map show the buildings of the Trinity House in Stepney and the road leading from there to Ratcliff Cross stairs, the first landing-place for London coming up the river?

The Trinity House was certainly there before 1618, and there were houses and booths at Ratcliff Cross to which the fishermen of the Thames estuary and Essex coasts brought their fish, and also houses along the south side of Ratcliff Highway. There were also some houses at Limehouse, for Pepys mentions (19 October 1661) that he met a Capt. Morshe, whose family had been resident close by there some 250 years.

In 1605 one of George Weymouth's crew was robbed by his Ratcliff landlord while waiting for his vessel to sail, and in 1553 Sir Hugh Willoughby set sail from there, as Hakluyt mentions.

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Sir Humphrey Gilbert was living at Limehouse in 1573-78, where he had a smelting business, trying to turn iron into copper, Sir Thomas Smith, from Saffron Walden, being his partner.

Edward Underhill was arrested in his house there in 1553 for a ballad on Queen Mary. (Lady Jane Grey had stood godmother to one of his daughters.)

The records of the Stepney Vestry from 1579 to 1594 still survive, and there was a Church-house there as well as the Church.

Yours faithfully,

Enfield.

HYLTON B. DALE.

## THE PAGEANT OF ST. PAUL'S CATHEDRAL.

THE story of modern London, says a writer in "The Sphere," is writ large in the stones of the metropolitan cathedral. There is no other building approaching it either in scale or conception in the British Empire. To Londoners it is the symbol of civic dignity, the crown of their city, a monument to national endeavour, and a Pantheon of momentous significance; for although the Abbey of Westminster holds the dust of kings, beneath the vaults of St. Paul's lie entombed Nelson and Wellington. The theory of modern London in relation to the expression of the Cathedral can be used advisedly; perhaps it was given to the architect, Sir Christopher Wren, to interpret into stone the forces which in the ensuing centuries were to mould the English into a mighty nation. Not only does the building signify the rebirth of the city after the disastrous fire, but it marks a step in the development of the race, and in its rich simplicity and masculine strength portrays the personality of its designer, even as the work of Winchester reveals the lineaments of William of Wykeham. This and more does St. Paul's convey. We enter from the west end and gaze at the *mise-en-scène*—according to mood, we are in London of the seventeenth century or brought into closer touch with the stirring events of to-day. We look around and conjure up visions of progress and humiliation. Marlborough has made his reputation, Wren has descended into the grave, Gay has died unpensioned. The Court of Queen Anne is succeeded by that of George I, with a crowd of German retainers, the second and third Georges rule, the American colonies are lost, and so the stage is prepared for the struggle with Napoleon. There is something of all this in the form of the building, something that stirs the imagination to the pageantry of history when the vibrant music of the organ resounds high in the dome or breaks in waves through the arcuations of the nave. Again, there is the music of pomp and circumstance in the clangour of the brazen tongues that speak defiance from the campanili insistent over the satellites in the lesser steeples. Napoleon is dethroned, Europe is at peace, Vulcan will rule henceforth. Steam is called into being, and from the distant Clyde the pulsations of beam engines propelling strange vessels stir the merchants of London. Through the long monotony of the Victorian era St. Paul's continues the centre of civic demonstrations. With the death of Wellington is buried the last of the eighteenth-century heroes, giving scope to the genius of Alfred Stevens, who, in a frenzy of inspiration, dashed off the design for the memorial on the diagram of the site issued to the competitors. Such thoughts crowd upon the mind in vivid sequence as we gaze enraptured on the gigantic labours of Wren. It is impossible to define how the associations of the Cathedral affect us other than by the obvious method of quoting historical facts. The truth, however, remains—in the heart of St. Paul's lies the soul of London.

## NOTES OF THE MONTH.

### *Old Westminster Streets.*

A report which has just been presented to the London County Council by its Improvements Committee upon the houses in North Street and Smith Square, Westminster, has more than common interest for students of old London (says Mr. Wilfred Whitten in "The Observer"). This small Georgian neighbourhood has a curious history. A few years ago much of it was slumdom, and streets which are now select of the select were fast sinking into the same social morass, or had long been given over to shabby gentility and lodging-house dismalness. In 1890 the Council acquired twenty-five houses in North Street and Smith Square, with a view to an extensive improvement scheme in this region, including Millbank. The crowbar was uplifted to destroy them. Then a strange thing happened. These houses began to interest a number of "the best people." Their nearness to the Houses of Parliament (all the streets are dominated by the Victoria Tower), to the Abbey, and to certain social and philanthropic rendezvous in Westminster, was shrewdly observed. The mellow beauty of the neighbourhood pleaded for it, and it was discovered that a few architects and artists had already settled there. These forlorn streets became eligible in their dotage, and then began the immigration which to-day explains the comeliness and choice seclusion. The Improvements Committee treated the Council to a little mild historical gossip. They stated that in North Street there is an unbroken row of these Early Georgian houses let as residences, and that these sixteen houses, together with nine in Smith Square, were built in the early part of the eighteenth century, and "form an almost unique group of property of this period of London." But to these houses must be added a large number in Cowley Street, Barton Street, and Great College Street. In these three streets, where the old houses have gone, new ones of rare architectural charm have arisen. By creation and re-creation a little district of singular grace has come into being, and it is good to learn now that North Street and South Square are safe until 1920. The odd thing is that a good deal of the old slumdom remains; nowhere in London can such strange neighbours be found as in a walk round Tufton Street, Dean Trench Street, and Gayfere Street. New houses, flats, and offices, built in ultra-modern solidity and taste, have been elbowing away old decrepit houses and decayed little town cottages. But the War has arrested the process, and the result is a comedy of juxtapositions.

### *Christmas Cards and Calendars.*

We have received from the Medici Society, Ltd., of 7 Grafton Street, London, W.1, a selection of their cards and calendars for Christmas and the New Year. Each bears upon it the reproduction of a fine work of art (printed either in colour or monochrome), the subjects embracing the whole wide range of ancient and modern painting. Produced in that perfect style which is associated with all that comes from the Medici Society, these cards and calendars will make an immediate appeal to all artists, connoisseurs, and other persons of good taste, who could desire nothing better to send to their friends as a souvenir of Christmas and the New Year. These cards and calendars are indeed perfect works of art, and it is astonishing that such fine things can be produced at prices that in no case exceed 2s. 6d. Some of the cards are priced as low as 3d. each.

### *Rebuilding the Verdun Battlefield.*

The work of restoration on the battlefield of Verdun has been entrusted by the French Minister of the Interior to the War Victims' Relief Committee of the Society of Friends. It will probably take fully two years. Much of the land is poisoned with gas shells, and much covered with concrete debris, while the inhabitants since 1916 have been scattered in many parts of France. The Mission has a scheme for rebuilding the shattered homes from the ruins of the battlefield. It is proposed to make concrete of the fragments of ruined houses, reinforced with strands of barbed wire. First a concrete floor will be laid; around it the sides of the house will be moulded in frames; and finally the whole house will be plastered over with cement and thus made solid and weather-proof. Gangs of workmen, moving from village to village, will put up these new houses. In some cases the very foundations of villages have been erased, and here new villages on garden village lines will be planned. The peasants whose homes have been damaged are entitled to an indemnity, but in the meantime the Mission are accumulating furniture, tools, pots, and pans for them, which will be paid for later.

\* \* \*

### *Status of the Architect.*

During the period of inactivity in the legitimate exercise of our profession, said Mr. Henry T. Hare in the course of his presidential address to the R.I.B.A., we are taking the opportunity of inquiring into the status of the architect. It is felt that, although the course of study and attainment required to equip an architect to carry out his duties efficiently is at least as severe as that required for other professions, from many causes the general public do not appreciate his position adequately. A very large amount of building is carried on either without an architect or under an entirely unqualified practitioner, thus bringing the profession into disrepute and leading to many abuses. The policy of the R.I.B.A. has been for many years to insist upon a very thorough course of training and education to qualify for membership, but unfortunately a large number of architects do not submit themselves to this course, and consequently do not belong to us; indeed, the difficulty of admission may be said to act as a deterrent. Is there any means by which the building public may be enabled to distinguish between the qualified and the unqualified? Is it practicable, short of actual compulsion, to ensure that every man who seeks to enter the profession shall be properly qualified by education and training to carry out the duties of his position to the satisfaction of his client and the benefit of the community? Have we, hitherto, properly correlated and adjusted the relative importance of the practical business and scientific side of our work with the historical and artistic aspects? Can any steps be usefully taken to organize and unify the profession? These and kindred questions are now being carefully considered, and the views of those competent to give opinions are being collected and noted with a view to so ordering the policy of the Institute as to lead to a general improvement in the position of the profession. In this connexion it is felt that architects have not hitherto adequately taken their part in public affairs, on many aspects of which they are peculiarly qualified to speak. We ought to have our representative in Parliament, and there are few local bodies which would not be strengthened by the addition of an architect member who would concern himself with the building projects of the district and its amenities.



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## NOTES OF THE MONTH.

### *The Old Factory.*

Those who are closely watching the tendencies would not be surprised to see the new movement in architecture spring from the factories. In no other direction has there been any recent stimulus of equal strength to that which has produced a new type of factory infinitely superior in every way to the old "blot-on-the-landscape" building. It seemed to arise, but, in effect, not precisely phoenix-like, out of its own ashes, and was more soul-depressing than a prison-house. Depression and discomfort were thought to be good for the soul of the worker. Unless his spirits were kept well below par, he might wax fat and kick. From the horrible delusion that made a factory, with its vile odours, its gloom, its grime, its deadly atmosphere, its appalling ugliness, a little better than a purgatory, and, all things considered, a great deal worse than a penitentiary, we have now, it is to be hoped, shaken ourselves free. In the coming rush, those who, either through employing the wrong people to design and construct it, or through a miscalculation of economic effects, revert to the old style of building, will soon find that they have made a most serious initial mistake—that they have to pay the penalty for falling behind the movement.

\* \* \*

### *The King on "A Better Britain."*

In the King's eloquent reply to the addresses presented last month by the Lords and Commons in the Royal Gallery of the Palace of Westminster, there were passages of immense practical significance. "We have," said His Majesty, "to create a better Britain, to bestow more care on the health and well-being of the people, and to ameliorate further the con-

ditions of labour. May not the losses of war be repaired by a better organization of industry and by avoiding the waste which industrial disputes involve? Cannot a spirit of reciprocal trust and combination of effort be diffused among all classes? May we not, by raising the standard of education, turn to fuller account the natural aptitudes of our people and open wider the sources of intellectual enjoyment?" His Majesty suggested that the spirit in which these great problems should be approached should be that which the war instilled. "It is on a sense of brotherhood and mutual goodwill, on a common devotion to the common interests of the nation as a whole, that its future prosperity and strength must be built up." It would be hardly possible to state more briefly yet with equal force the momentous social and industrial aims and issues of the hour. Of course, it can be claimed that every human interest is related to building, but in the instances before us there is no need to strain the relationship. It is self-evident that amelioration implies better building, whether of workshops or of dwellings, and that the greater degree of health and comfort thus obtained affects not only efficiency and economy in production, but also the temper of the workers. It follows, as a clear matter of course, that much "labour unrest" would be avoided if the workers had better reason to be contented with their environment at home and at the works.

\* \* \*

### *A Correction.*

We regret that in our description of Australia House (September issue) the name of Mr. V. Martorell was misspelt. At his request we are pleased to give the correct rendering as above.



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## NOTES OF THE MONTH.

### *Projected Zeebrugge Memorial.*

A proposal has been submitted to the General Council of the Anglo-Belgian Union by Monsieur Eugène Standaert, Deputy for Bruges, that the Union might undertake to promote a competition for the design of a monument which it is proposed to erect on the Mole at Zeebrugge as a memorial of the heroic landing of the officers and men of H.M.S. "Vindictive" on 23 April 1918—St. George's Day. The design for this monument will be open to competition by artists and sculptors of Belgian and British nationality. A committee has been formed to carry these proposals into effect. Full details of the competition will be published at a later date. The address of the Anglo-Belgian Union is 6 Burlington Gardens, W.1.

\* \* \*

### *Exhibition of Rubbings of Monumental Brasses.*

In view of the suitability of monumental brasses as one means of meeting the extensive demand for war memorials, a selection of rubbings of well-known English brasses from the Museum Collections has been arranged in Room 135 (top floor) of the Victoria and Albert Museum. The rubbings have been classified under the headings Military, Ecclesiastical, Civil, and other Costume, and illustrate the development of this form of memorial in England from the thirteenth century onwards. A few from modern brasses are also shown, including examples from a series now in process of erection upon an "Eleanor" cross at Sledmere, Yorks, in memory of officers and men from that village who have fallen during the war. It is hoped that this exhibition may give an impetus towards

reviving the use of a form of memorial which is at once distinctively English in character and admirably suited for the purpose in view. The Museum Collections contain rubbings of over 2,400 brasses. Any which are not on exhibition can be seen on application at the Students' Room of the Department of Engraving, Illustration, and Design (Room 132). A complete list, with illustrations of 176 rubbings on fifty-two plates, is published, price 2s. 6d.

\* \* \*

### *Deadwood.*

In the course of a communication on the above subject, Mr. J. H. Kerner-Greenwood writes: Why does the Government hold up Professor Groomes's scheme for scientific work in timber for mines and house-building? We are told it is because the timber trade does not give the scheme adequate support. People who sell such inferior wood as deadwood are not likely to further such a scheme—part of their living would be gone. Such wood is lifeless. Decay must attack it very soon. Dry-rot is the most likely disease. If a Government Department were appointed scientifically to investigate timber under all kinds of atmospheric conditions, it would do very good work, and I am sure there would be an end to the importation of these inferior soft timbers. The two chief architects' associations ought to interest themselves in the matter because of the legal liability to architects. Perhaps some of the eminent architects now so closely in touch with the Government will further Professor Groomes's scheme for the sake of the general public, even if the legal liability of the architect is treated as of little or no consequence.

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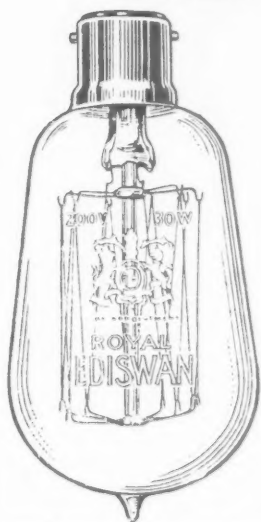
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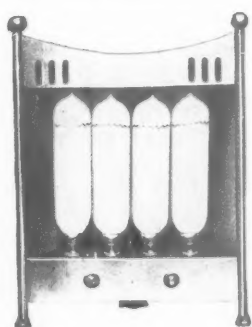
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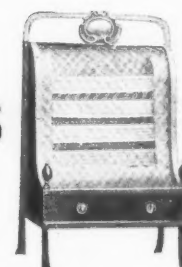


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The Editor will be pleased to give his careful consideration to any articles, photographs, or drawings which may be sent with a view to publication, but he cannot hold himself responsible for loss or damage, except in the case of material which has been accepted or specially commissioned.

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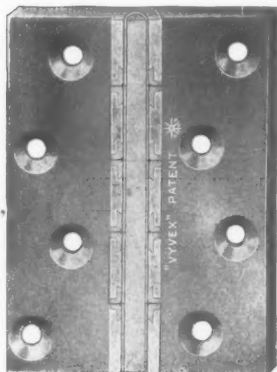


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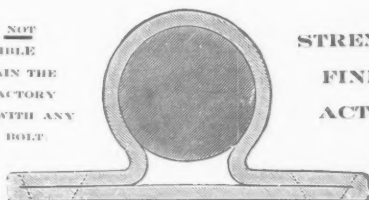
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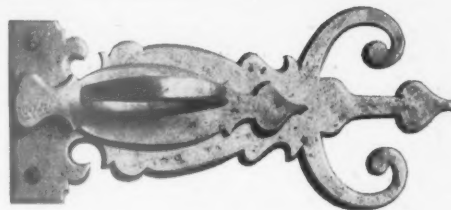
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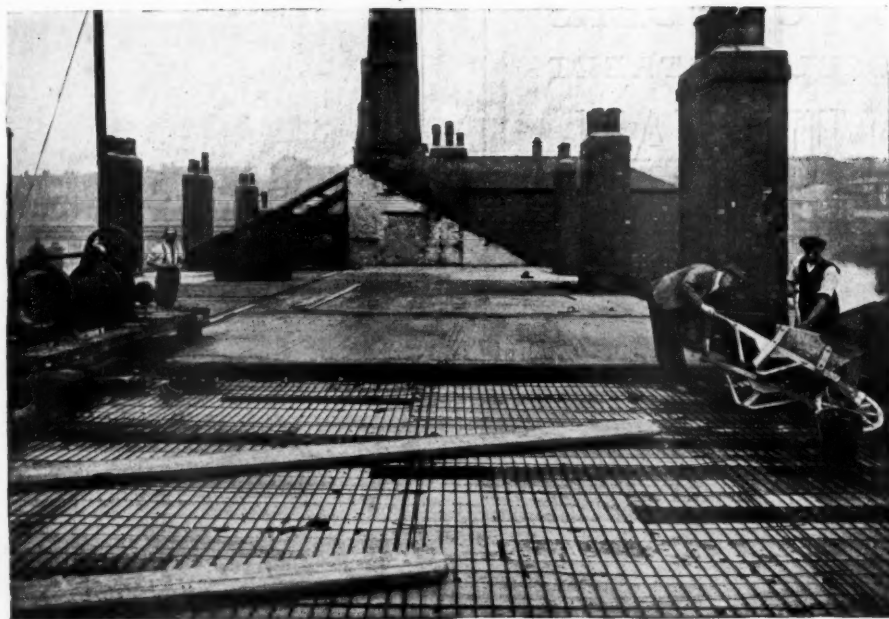
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There are still a certain number of persons, however, who persist in keeping a bowl of water steaming away in front of even the most modern of gas fires: to recognise the fallacy underlying this practice involves a clear understanding of the distinction between radiant and convected heat.

Radiant heat is *natural* heat, like that of the sun; it is warmth emitted by a glowing incandescent body, which directly heats the solid objects within its range, and raises the temperature of the air only indirectly and slightly by contact with these solid objects.

Convected heat, on the other hand, gets its effect by using the intervening air as a vehicle; the result of thus directly heating the air of a room is to increase its capacity and desire for moisture, so that it seizes with avidity upon the moisture in the eyes, skin and nose and throat membranes of the occupants.

These unpleasant effects were sometimes noticeable when the old-pattern gas fires were used, for the reason that although those fires gave out radiant heat this only represented a small percentage of their total power; they also heated the air of rooms by passing that air through very hot chambers where it was raised to a high temperature. Hence the bowl of water.

The modern gas fire, however, gives out by far the greater percentage of its heat in a radiant form, and such convected heat as it emits is of comparatively low temperature, having but a moderate effect on the air.

At the same time, gas fires—the use of which in the present period of fuel shortage has been clearly proved to contribute to the national interest—are now so designed that the products of combustion are entirely carried away through the flue. The net result, therefore, is that there is no longer any reproach which can be levelled against the gas fire on the grounds of hygiene, and with this statement the medical profession is in active agreement.

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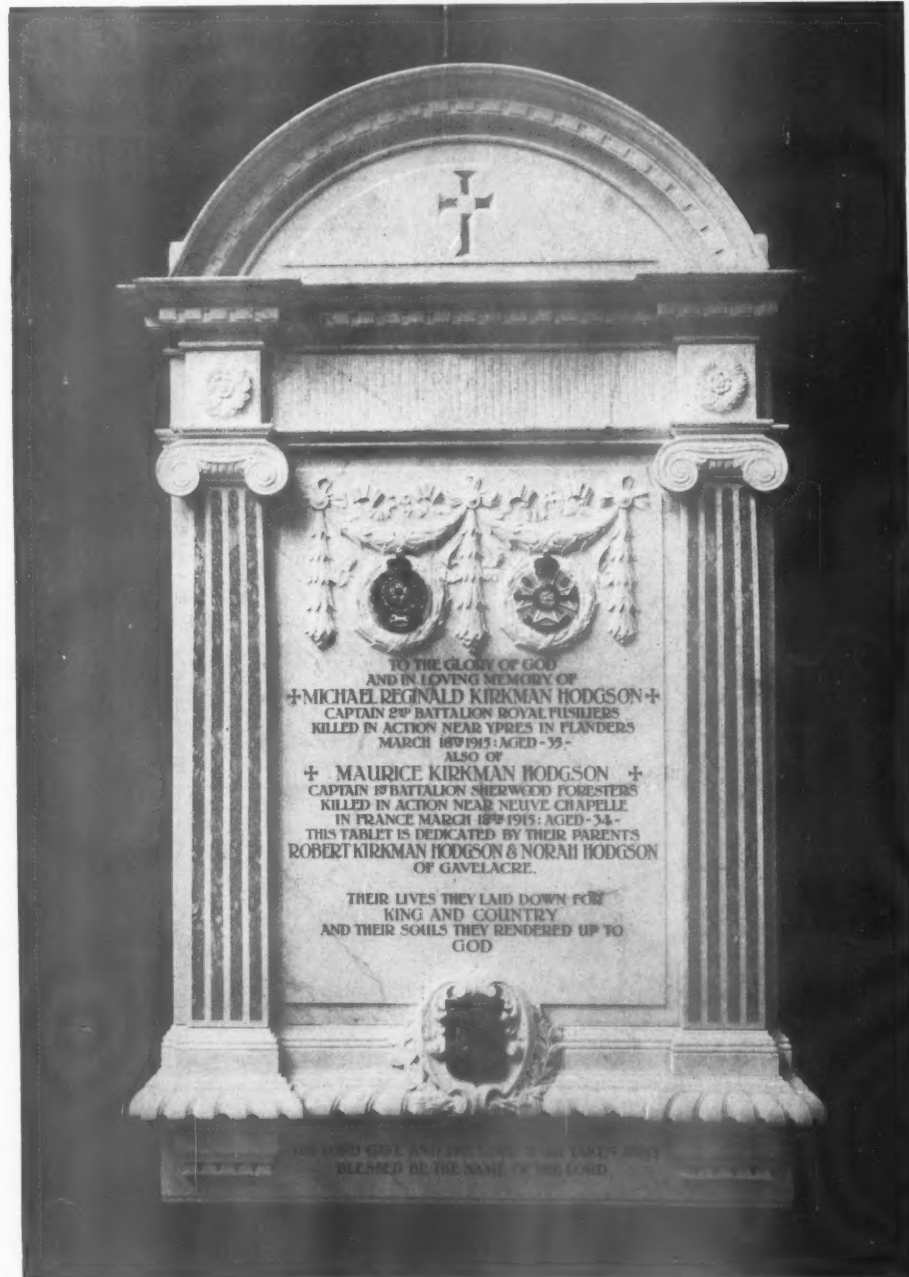
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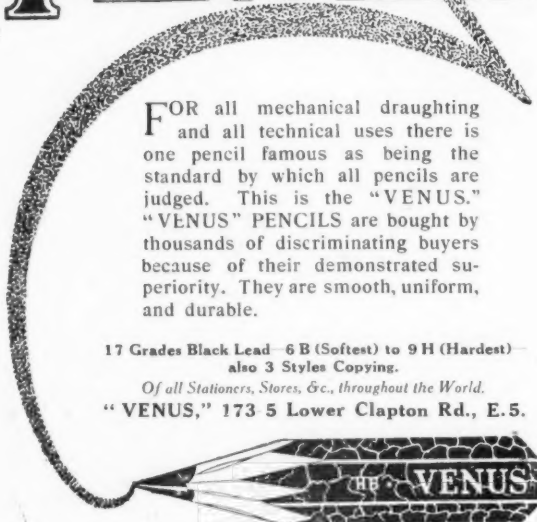
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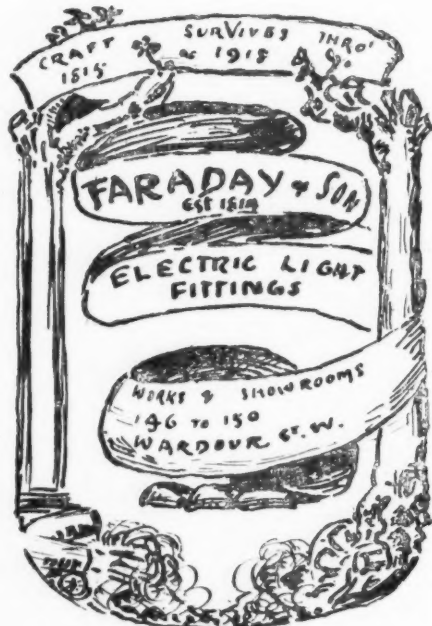
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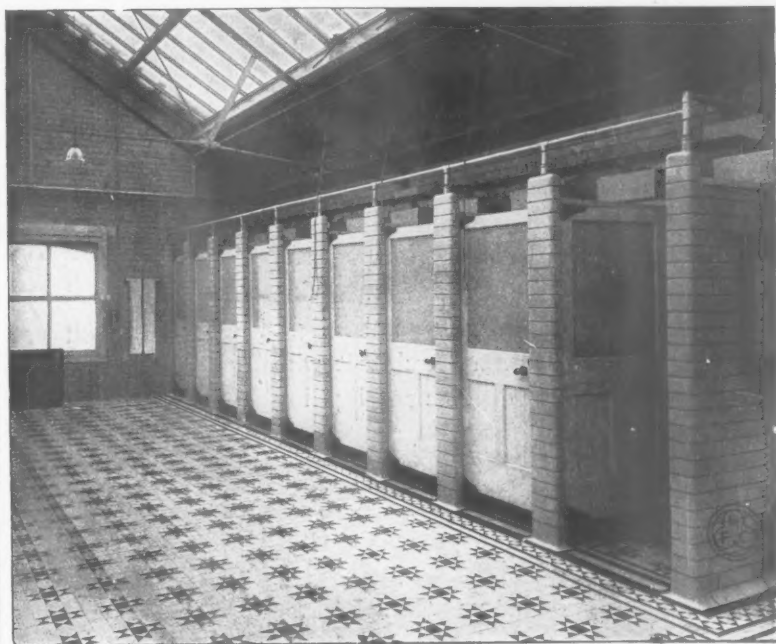
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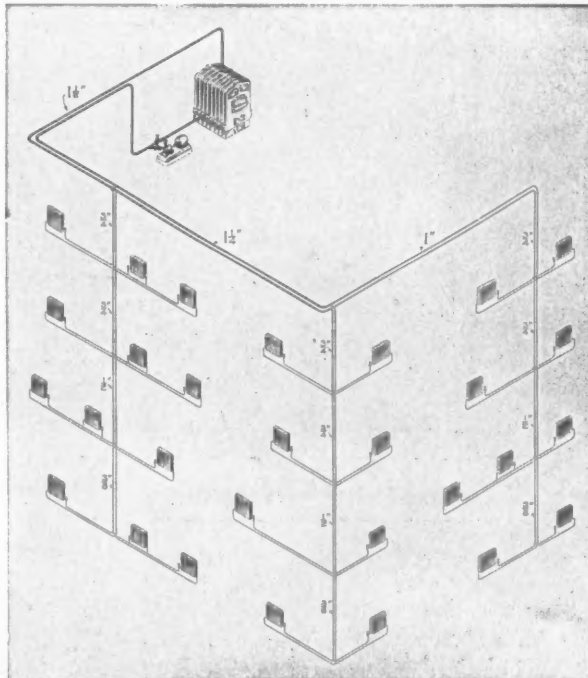
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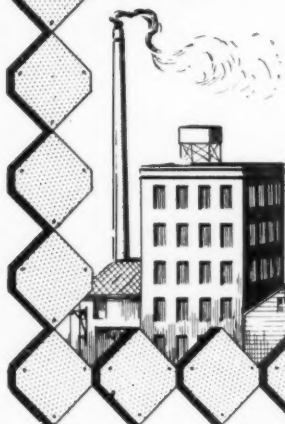
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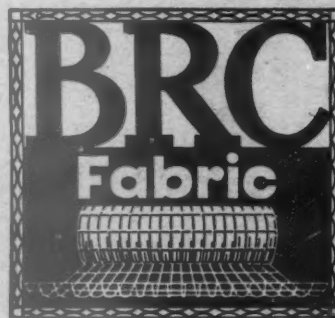
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